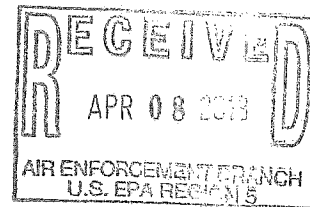




(Fed-X'ed)

April 4, 2013



Mr. George Czerniak, Director  
Air and Radiation Division  
United States Environmental Protection Agency  
Region 5  
77 West Jackson Blvd. (R-19J)  
Chicago, IL 60604-3590

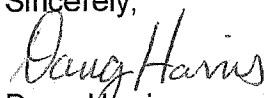
RE: Veolia ES Technical Solutions, L.L.C.  
Sauget, IL  
40 CFR Part 71  
Title V Permit Renewal Application

Dear Mr. Czerniak,

Enclosed for your review is Veolia ES Technical Solutions, L.L.C. Sauget, IL facility's Title V permit renewal application prepared in accordance with 40 C.F.R. Part 71. This is a renewal application to the Title V permit that was issued on September 12, 2008 and expires on October 12, 2013.

If you have any questions on this submittal or would like to meet to discuss this application, please call Dennis Warchol or me at (618) 271-2804.

Sincerely,

  
Doug Harris  
General Manager

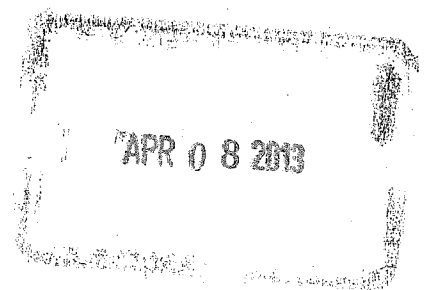
Att.

cc: EPA File

**APPLICATION FOR RENEWAL OF A  
MAJOR SOURCE OPERATING PERMIT**

**Veolia ES Technical Solutions  
#7 Mobile Avenue  
Sauget, Illinois 62201**

**APRIL 2013**



## TABLE OF CONTENTS

TABLE OF CONTENTS.....	2
I. IDENTIFICATION INFORMATION .....	3
A. Facility Information.....	3
B. Source Description .....	3
II. EMISSIONS INFORMATION .....	5
A. Hazardous Waste Combustors .....	5
B. Material Processing Areas.....	5
C. Drum Crusher.....	6
D. Storage Tank Units.....	6
E. Bulk Feed Building .....	6
F. Gasoline Storage Tank.....	7
G. Boiler #1.....	7
H. Fugitive Organic Emissions .....	7
I. Emergency Generators.....	7
J. Insignificant Emission Units.....	7
K. Actual Emission Rates .....	8
III. APPLICABLE REQUIREMENTS .....	9
A. 40 CFR 63 Subpart DDDDD National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.....	9
B. Removal of Obsolete Requirements Related to Compliance Dates in 40 CFR 63 Subpart EEE National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors.....	10
C. Adjustment of Basis for VOM Emission Calculations for Drum Crusher.....	10
D. Transfer of Combustors' Operating Permit Limits from Main Body of Permit to Appendix that Contains Most Recent Notification of Compliance Summary Table.....	11
E. 40 CFR 63 Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. ....	11
F. 35 IAC 219.585 Gasoline Volatility Standards.....	12
IV. DEMONSTRATION OF COMPLIANCE .....	15
V. COMPLIANCE STATUS AND CERTIFICATION.....	16
VI. STANDARD APPLICATION FORMS .....	17
APPENDIX A: EMISSION CALCULATIONS .....	18
APPENDIX B: CURRENT NOTIFICATION OF COMPLIANCE (NOC) OPL SUMMARY.	21

## I. IDENTIFICATION INFORMATION

Veolia ES Technical Solutions (Veolia) owns and operates a Resource Conservation and Recovery Act (RCRA) treatment, storage and disposal facility in Sauget, Illinois. The primary facility activities include receipt of bulk waste or waste in containers, waste processing, waste storage, and waste incineration in one of three combustion units. The facility operates in accordance with a Title V permit to operate, Permit No. V-IL-12716300103-08-01 issued in accordance with 40 CFR Part 71 by USEPA Region 5 and the most recent Notification of Compliance (NOC) that contains operating limits for the combustors. In addition, Veolia operates in accordance with a hazardous waste Part B permit for treatment, storage, and disposal of hazardous waste.

### A. Facility Information

**Facility Name:** Veolia ES Technical Solutions (Veolia)  
**Plant ID:** 1716300103  
**Address:** #7 Mobile Avenue  
 Sauget, IL 62201-1069  
 St. Clair County  
**Geographical:** Latitude 38.59447  
 Longitude -90.1854  
**Permit Contact:** Douglas Harris, General Manager

Please refer to Form GIS of the standard application forms for additional specific facility information. The forms are contained in Section VI of this document.

### B. Source Description

The Veolia facility is comprised of emission units that have been grouped into twelve defined source emission points. There have been no physical changes to the existing emission units as described in the original Title V permit application. No emission units have been added since the original Title V permit became effective (October 12, 2008). The grouped sources, therefore, are provided below as they are listed in Permit #V-IL-1716300103-08-01, Section (1.0)(B).

Emission Unit	Description	Manufacturer /Model	Date of Construction	Emission Control Equipment
Hazardous Waste Combustors	Incineration Unit #2 (16 mmBtu/hr)	Trade Waste Incineration TWI-2000, Series 2	9/1986	Joy-Niro Spray Dryer Absorber (SDA-2), Pulse Flo Fabric Filter (BH-2)
	Incineration Unit #3 (16 mmBtu/hr)	Trade Waste Incineration TWI-2000, Series 2	9/1986	Joy-Niro Spray Dryer Absorber (SDA-3), Pulse Flo Fabric Filter (BH-3)

Emission Unit	Description	Manufacturer /Model	Date of Construction	Emission Control Equipment
	Incineration Unit #4 (50 mmBtu/hr)	International Waste Energy, PY*ROX	6/1988	Tempering Chamber, Activated Carbon Injection, Spray Dryer Absorber (SDA-4), Fabric Filter (BH-4)
Material Processing Areas	Material Processing Areas #1 and #2 (MP-1 and MP-2)		1988	None
	Lab Pack Repack Area		1988	None
Drum Crusher	Crushing of RCRA-empty containers		1984	None
Storage Tanks for Liquid Wastes	Tanks: #2, #4, #6, #8, #10, #20, #30, #40, #50, #60, #300, #302, #304, #306, #308, #310, #312, #314	Modern Welding	1988 2&4 replaced in-kind 4/2002 10&20 replaced in-kind 6/2004 30 replaced in-kind 3/2009	Activated Carbon Adsorbers on each
Storage Tank for #2 Fuel Oil	Tanks #390	Modern Welding	1988	None
Bulk Feed Building (BF Bldg)	Temporary storage of bulk solid wastes in pits prior to being fed to Incineration Unit #4		1988	Cyclone, Airtol Baghouse (BF Bldg-BH-1), Activated Carbon Adsorption Unit (BF Bldg-CA)
Gasoline Storage Tank	550-gallon tank with submerged loading pipe		1992 replaced in-kind 6/2012	None
Diesel Fuel Tank (Insignificant)	550-gallon tank		1992 replaced in-kind 6/2012	None
Kerosene Tank (Insignificant)	550-gallon tank		1992 replaced in-kind 6/2012	None
Boiler #1	Natural gas-fired Boiler (10.6 mmBtu/hr)	Cleaver Brooks, 250	11/1995	None
Emergency Generators -2	#2 Fuel oil-fired (0.4 MMBtu/hr ea.)		1988	None
Fugitive Emissions	Pumps, Valves, Flanges, Open-ended Lines, Compressors		N/A	None

Descriptions of emission units and control equipment are provided on the standard application forms EUD-1 and EUD-2 found in Section VI of this document.

## II. EMISSIONS INFORMATION

The emission sources at the Veolia facility have the potential to emit particulate matter (PM), volatile organic materials (VOM), sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and organic/inorganic hazardous air pollutants (HAPs). Emissions are generated from the storage and handling of waste in material processing areas, breathing and working losses from storage tanks, combustion of waste, combustion of natural gas and organic liquid transfer in piping. The process flow, emission unit descriptions and emission control information has not changed from that provided in the original Title V permit application. The following sections provide brief summaries of the pertinent process and emission rate information.

### A. Hazardous Waste Combustors

Incineration units #2 and #3 are identical fixed-hearth incinerators with a two-stage combustion process and maximum heat input capacity of 16 MMBtu/hr each. Ignition of waste material takes place in the primary (lower) combustion chamber at temperatures in excess of 1,700 degrees F. A secondary (upper) combustion chamber serves as an "after-burner" for process gases. The secondary combustion chamber temperature is maintained at a minimum temperature of 1,800 degrees F. Natural gas is used as auxiliary fuel in both chambers to maintain minimum combustion chamber temperatures. Each unit is equipped with a spray dryer adsorber and fabric filter air pollution control system. The fabric filter for unit #2 has four baghouse chambers while the fabric filter for unit #3 has three baghouse chambers.

Incineration unit #4 is a rotary kiln equipped with a secondary combustion chamber and a maximum heat input capacity of 50 MMBtu/hr. Ignition of waste material takes place in the primary kiln at temperatures in excess of 1,500 degrees F. The secondary combustion chamber temperature is maintained above 1,880 degrees F. Natural gas is used as auxiliary fuel to maintain minimum combustion temperatures. This unit is equipped with an air pollution control system that consists of a tempering chamber, activated carbon injection, a spray dryer adsorber, and a fabric filter.

The incineration units generate emissions of PM, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOM and organic/inorganic HAPs.

### B. Material Processing Areas

Material processing involves repackaging of containerized solid wastes into smaller, more manageable containers for incineration. Some solid wastes may be received containing free liquids that may be aqueous or organic. During material processing, free liquids are fixed with an inert absorbent to facilitate repackaging. Material processing occurs at MP-1, MP-2, and the Lab Pack Repack Facility in Building 2B. These operations emit fugitive emissions in an enclosed building. VOMs and organic HAPs are emitted to the atmosphere through building/area exhaust fans.

### C. Drum Crusher

Drums received that are unsuitable for reuse are crushed at the Drum Crusher after being emptied. These empty drums may contain residual organic material. Crushed drums are transported off-site for disposal. Fugitive emissions of VOM and organic HAP are emitted to the atmosphere.

### D. Storage Tank Units

Bulk liquid wastes are stored at Tank Farm #1 and Tank Farm #3. All bulk liquid waste tanks are vertical, fixed-roof tanks equipped with carbon canisters for control of emissions. In addition, No. 2 fuel oil, kerosene, and gasoline are also stored onsite in tanks. Emissions from the liquid bulk storage and handling units are VOMs and organic HAPs. Storage tank emission units and their capacities are listed below.

Tank ID	Location	Capacity (gallons)
Tank #2	Tank Farm #1	4,931
Tank #4	Tank Farm #1	4,931
Tank #6	Tank Farm #1	7,200
Tank #8	Tank Farm #1	5,280
Tank #10	Tank Farm #1	12,869
Tank #20	Tank Farm #1	12,869
Tank #30	Tank Farm #1	12,869
Tank #40	Tank Farm #1	12,869
Tank #50	Tank Farm #1	12,869
Tank #60	Tank Farm #1	12,869
Tank #300	Tank Farm #3	30,000
Tank #302	Tank Farm #3	30,000
Tank #304	Tank Farm #3	30,000
Tank #306	Tank Farm #3	30,000
Tank #308	Tank Farm #3	30,000
Tank #310	Tank Farm #3	30,000
Tank #312	Tank Farm #3	10,000
Tank #314	Tank Farm #3	10,000
Tank #390	Tank Farm #3	30,000
Kerosene	South of Parking Lot	550
No. 2 Fuel Oil	South of Parking Lot	550
Gasoline	South of Parking Lot	550
No. 2 Fuel Oil	Fire Pump House	550

### E. Bulk Feed Building

Bulk solid wastes are stored in four pits in the Bulk Feed Building. Solids stored in these pits are incinerated in Unit 4. Bulk solid wastes are moved from the pits to Unit 4 by a clamshell through an enclosed gallery. The activities within the building generate emissions of PM, VOM and organic/inorganic HAPs. The building exhaust is equipped with an air pollution control system that consists of a cyclone, two baghouses, and a carbon adsorption system.

#### **F. Gasoline Storage Tank**

Gasoline is stored in a 550-gallon horizontal tank for utilization by company vehicles. The tank is equipped with a submerged loading pipe. VOM emissions are generated from the tank.

#### **G. Boiler #1**

There is 10.6 MMBtu/hr natural gas boiler located north of Tank Farm #1. The boiler is used to generate heat and steam for on-site uses. The natural gas combustion in the boiler generates emissions of PM, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOM and organic/inorganic HAPs. There is no emission control devices associated with this unit.

#### **H. Fugitive Organic Emissions**

Fugitive VOM and organic HAP emissions are generated by leaking equipment like valves, flanges, and pumps. Equipment components are inspected and monitored to minimize fugitive emissions from these sources.

#### **I. Emergency Generators**

An emergency generator that combusts #2 fuel oil is used for emergency power/energy requirements. The generator rating is less than 112 kilowatts or 150.2 horsepower. The maximum hourly design rate is approximately 0.4 MMBtu/hr. The generator is only used in the case of a power outage or natural gas curtailment. Nonemergency operation is limited to maintenance and testing that is necessary to maintain the readiness of the unit.

A second emergency generator is used to operate the fire water pump in the event of an onsite fire. This generator also combusts #2 fuel oil and has a maximum hourly design rate of approximately 0.4 MMBtu/hr (< 112 kilowatt rating).

When operated, the #2 fuel oil combustion generates emissions of PM, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOM and organic/inorganic HAPs. There are no emission control devices associated with these units.

#### **J. Insignificant Emission Units**

The list of insignificant emission units contained in the original Title V permit no. V-IL-1716300103-08-01 is provided below. No insignificant emission units have been added since the original Title V permit became effective (October 12, 2008).

2.5 mmBtu/hr Tioga portable boiler  
Ash handling  
Handling of spent dry scrubber solids  
Lime unloading and proportioning  
Gasoline storage tank  
Kerosene storage tank



Diesel fuel storage tank  
 Use of absorbent material  
 General vehicle maintenance and servicing (assumed to include diesel fuel handling)  
 Laboratory  
 Piping and storage system for natural gas  
 Non-halogenated cold cleaning degreasers  
 Internal combustion engines of motor vehicles  
 Storage and handling of closed drums

**K. Actual Emission Rates**

Pollutant	Annual Emissions (tons)				
	2007	2008	2009	2010	2011
CO	1.93	1.95	1.67	1.41	1.21
NO <sub>x</sub>	54.77	54.76	55.23	57.10	58.16
PM	1.04	1.04	1.07	1.10	1.12
SO <sub>2</sub>	0.598	0.496	0.520	0.490	0.49
VOM	1.60	1.70	1.74	1.62	1.51
HCl	2.69	3.56	2.09	2.03	1.89

### III. APPLICABLE REQUIREMENTS

The existing Title V permit no. V-IL-1716300103-08-01 details the requirements that are applicable to Veolia. However, Veolia requests several changes to permit requirements based upon new regulations coming into effect, obsolete requirements that have been superseded and the collection of information during the permit term that affects the basis in the original application. The requested changes are described below.

#### A. 40 CFR 63 Subpart DDDDD National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.

The facility operates a natural gas-fired boiler (Boiler #1) with a maximum heat input rate of 10.6 MMBtu/hour. On January 13, 2013, USEPA published the final standards for HAPs from the combustion of fuel in boilers and process heaters. Since the facility is a major source of HAPs, the requirements of 40 CFR 63 Subpart DDDDD (Boiler MACT) apply to Boiler #1. Veolia must provide initial notification in accordance with 40 CFR 63.9(b)(2) by May 31, 2013. The boiler must be in compliance by January 31, 2016.

There are no applicable numerical emissions limits, operating limits or performance testing requirements in the major source Boiler MACT for units designed to burn natural gas (Gas 1). As described in Table 3 to Subpart DDDDD, Boiler #1 must meet the work practice standards listed below.

- Performance of an annual tune-up addressing all regulated emissions. The tune-up shall include the following as described in 40 CFR 63.7540(10):
  1. Inspection of the burner, the flame pattern and the air-to-fuel ratio controls for operation in accordance with manufacturer's specifications and performance of adjustments as necessary.
  2. Optimization of total CO emissions in coordination with NO<sub>x</sub> limitations.
  3. Measurement of CO concentrations and oxygen concentration in the boiler exhaust.
  4. Production of a written report documenting CO concentrations, corrective actions and the amount of fuel combusted during the year.
- Performance of a one-time energy assessment by a qualified energy assessor.
- Submission of a Notification of Compliance Status within 60 days of the initial tune-up. The applicable information listed in 40 CFR 63.7545(e)(1) through (8) must be provided in the Notification of Compliance Status.
- Submission of an Annual Compliance Report as described in 40 CFR 63.7550 by January 31<sup>st</sup> of each year.

The existing Permit #V-IL-1716300103-08-01 in Section 2.7 Unit-Specific Operating Requirement for Boilers requires that Boiler #1 CO concentrations not exceed 100 ppm on a dry basis corrected to 3% oxygen. In addition, the facility is required to conduct annual performance testing for CO and monitor monthly natural gas consumption. The

results from the last four years of performance testing of the boiler for CO concentrations are provided in the table below.

Date of Test	Highest CO Concentration <sup>1</sup> (ppm)
June 25, 2009	0.06
June 17, 2010	< 0.01
June 9, 2011	< 0.01
June 8, 2012	0.13

The CO concentration of the boiler exhaust is very small and much less than the limit of 100 ppm. The design of the Cleaver Brooks boiler is conducive to minimizing CO emissions by achieving good combustion. Veolia requests that the requirement to conduct a performance test for CO in Section 2.7(D)(2) be removed and replaced with the requirement to conduct an annual tune-up of the boiler as contained in the Boiler MACT discussed above. The annual tune-up will include measurement and optimization of the CO concentration in the boiler exhaust which achieves the same result as the performance test – demonstrating compliance with the CO emission limitations of the permit.

**B. Removal of Obsolete Requirements Related to Compliance Dates in 40 CFR 63 Subpart EEE National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors.**

Veolia requests that permit conditions in which the compliance date has passed be removed from the Part 71 permit. Prior to October 14, 2008, the combustors were required to comply with different emission limitations than those that became applicable after that date and continue to be applicable. The facility demonstrated compliance with these limitations at the time; however, they are not relevant to facility requirements in the Part 71 permit going forward.

**C. Adjustment of Basis for VOM Emission Calculations for Drum Crusher.**

The Part 71 permit contains recordkeeping requirements for the drum crusher VOM emissions that must be calculated using the emission factor of 0.0914 lb VOM/drum crushed. This emission factor was calculated based on the conservative assumption that only methanol residue is in the containers to be crushed and that methanol is the only VOM released as the containers are crushed. This was conservative because methanol has a higher vapor pressure than most of the volatiles found in container residues, therefore, assuming the emissions were all methanol maximized the potential VOM emission rate. It was understood that this assumption significantly overestimated the VOM emissions from the drum crusher; however, the absence of data for the drum crusher operation required a conservative approach.

Veolia has collected data for the five years since the permit was issued including: the number of containers crushed, the type of volatile constituents likely to be in container residue and the amount of these volatile constituents processed on an annual basis. A

<sup>1</sup> CO concentration in ppm at 3% oxygen.

new VOM emission factor was calculated utilizing this data from actual operations. The container residue was characterized as containing the top organics at their overall concentrations in the waste received in 2007 – 2011. The remainder of the waste was represented as water and inert solids. This approach yielded a VOM emission factor of 0.0221 pounds VOM per drum crushed. With a maximum crushing rate of 40 drums per hour, the potential to emit for the drum crusher was calculated to be 0.8833 pounds VOM per hour and 3.87 tons VOM per year. The detailed calculations are provided in Appendix A.

**D. Transfer of Combustors' Operating Permit Limits from Main Body of Permit to Appendix that Contains Most Recent Notification of Compliance Summary Table.**

The existing Permit #V-IL-1716300103-08-01 in Section 2.1(C) Hazardous Waste Combustors, Units 2, 3 and 4 contains work practice standards and operational requirements. Condition 2 of this Section lists the operating parameter limits (OPLs) for the combustors that are used to demonstrate compliance with 40 CFR 63 Subpart EEE. Veolia requests that the table containing the specific OPL limits be removed from Condition 2. Instead, we propose that Condition 2 read as follows.

*"2. The Permittee must operate Units 2, 3, and 4 under the operating parameter limits (OPLs) listed in the Current NOC a summary of which is provided in Attachment A to this permit document. Operation in accordance with the NOC limits is used to demonstrate compliance with Subpart EEE."*

The table summarizing the OPLs from the current NOC would be moved to an attachment at the back of the permit. This eliminates the need to change tables within permit conditions and allows the NOC information to be updated easily.

**E. 40 CFR 63 Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.**

Two emergency generators are located at the facility. They are stationary reciprocating internal combustion engines (RICE) with a site rating of less than 500 brake HP used only for emergency purposes that operate at a major source of HAP emissions. The emergency RICE must comply with the requirements of 40 CFR 63.6640(f) in order to be considered emergency stationary RICE. These requirements are listed below.

(1) For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in nonemergency situations for 50 hours per year, as permitted in this section, is prohibited.

(2) There is no time limit on the use of emergency stationary RICE in emergency situations.

(3) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

(4) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for nonemergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(4), as long as the power provided by the financial arrangement is limited to emergency power.

Each emergency RICE must comply with the following requirements by May 3, 2013 and at all times thereafter.

1. During normal operations:
  - a. Change oil and filter every 500 hours of operation or annually, whichever comes first;
  - b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;
  - c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
  - d. During startup: minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
2. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
3. Install a non-resettable hour meter if one is not already installed.
4. Maintain the following records:
  - Description of each malfunction of operation/monitoring equipment;
  - Description of all maintenance performed;
  - Description of actions taken during malfunction to minimize emissions;
  - Description of corrective actions;
  - List of maintenance conducted to demonstrate that RICE was operated and maintained in accordance with the maintenance plan/manufacturers recommendations;
  - The hours of operation as monitored by the non-resettable hour meter; and
  - Description of purpose of operation hours spent.
5. Sources must report any failure to perform the work practices on the required schedule.

#### **F. 35 IAC 219.585 Gasoline Volatility Standards.**

Effective January 28, 2013, the requirements of Illinois regulation 35 IAC 219.585 were repealed. Veolia requests that **Section 2.6 Unit-Specific Operating Requirements for Gasoline Storage Tanks** be revised to remove the items related to the repealed rule. These items are listed below.

Condition 2.6(A)(3)

*The Permittee shall not sell, offer for sale, dispense, supply, offer for supply, or transport for use in Illinois gasoline whose Reid vapor pressure exceeds the applicable limitations set forth in 35 IAC 219.585 (b) and (c) below during the regulatory control periods, which shall be June 1 to September 15. [35 IAC 219.585(a)].*

Condition 2.6(A)(4)

*The Reid vapor pressure of gasoline, a measure of its volatility, shall not exceed 7.2 psi (49.68 kPa) during the regulatory control period in 1995 and each year thereafter. [35 IAC 219.585(b)].*

Condition 2.6(A)(5)

*The Reid vapor pressure of ethanol blend gasolines having at least nine percent (9%) but not more than ten percent (10%) ethyl alcohol by volume of the blended mixture, shall not exceed the limitations for gasoline set forth in subsection (b) of 35 IAC 219.585 by more than 1.0 pounds per square inch (psi)(6.9 kilopascals). 35 IAC 219.585(c)].*

Condition 2.6(C)(1)

*The Permittee shall have gasoline stored in the affected tank sampled and analyzed for Reid vapor pressure. Samples shall be conducted at least once per calendar year or within 15 days of a written request from EPA. [40 C.F.R. § 71.6(a)(3)(i)(B)].*

Condition 2.6(C)(2)

*The Permittee shall conduct all sampling (testing) of gasoline required by 35 IAC 219.585 in accordance with the procedures contained in 40 C.F.R. part 80, appendix D, "Sampling Procedures for Fuel Volatility."*

Condition 2.6(C)(3)

*The Permittee shall measure Reid vapor pressure of gasoline in accordance with the procedures contained in "Tests for Determining Reid Vapor Pressure (RVP) of Gasoline and Gasoline-Oxygenate Blends," as set forth in 40 C.F.R. part 80, appendix E.*

Condition 2.6(C)(4)

*The Permittee shall determine the ethanol content of ethanol blend gasolines using one of the approved testing methodologies specified in 40 C.F.R. part 80, appendix F.*

Condition 2.6(C)(5)

*Any alternate to the sampling or testing methods or procedures contained in 35 IAC 219.585 (d), (e), and (f) must be approved by the IEPA, which shall consider data comparing the performance of the proposed alternative to the performance of one or more approved test methods or procedures. Such data shall accompany any request for IEPA approval of any alternate test procedure. If the IEPA determines that such data demonstrates that the proposed alternative will achieve results equivalent to the approved test methods or will achieve results equivalent to the approved test methods or procedures, IEPA shall approve the proposed alternative.*

Condition 2.6(C)(6)

*On an annual basis, the Permittee shall conduct an inspection of the gasoline storage tank to review its physical condition and ability to comply with 35 IAC 219.585. [40 C.F.R. § 71.6(a)(i)(3)(B)].*

Condition 2.6(D)(3)

*The Permittee shall maintain records for each shipment of material loaded into the gasoline storage tank that include copies of the invoice, bill of lading or other documentation from the supplier that provides the type of material, the amount of shipment, date of delivery, and the Reid vapor pressure (psi) of the gasoline. The Permittee shall keep these records for three years. [40 C.F.R. § 71.6(a)(3)(i)(B)].*

Condition 2.6(D)(4)

*The Permittee must maintain records of results of any testing samples. [40 C.F.R. § 71.6(a)(3)(i)(B)].*

#### **IV. DEMONSTRATION OF COMPLIANCE**

Compliance demonstration methods, monitoring, recordkeeping and reporting for the sources operating at Veolia are as required in Permit #V-IL-1716300103-08-01. An Annual Compliance Certification is submitted each year for all applicable requirements as they are described in the Part 71 permit.



## **V. COMPLIANCE STATUS AND CERTIFICATION**

Veolia is in compliance with the permit and regulatory requirements as they apply to the emissions sources operating at the facility. The statement of completeness and certification of compliance by the facility's responsible official is provided on the CTAC Form 5900-2 in Section VI of this document.

## **VI. STANDARD APPLICATION FORMS**

This section contains the completed applicable standard permit application forms as published by the United States Environmental Protection Agency.



OMB No. 2060-0336, Approval Expires 06/30/2015

## Federal Operating Permit Program (40 CFR Part 71)

**GENERAL INFORMATION AND SUMMARY (GIS)****A. Mailing Address and Contact Information**

Facility name Veolia ES Technical Solutions

Mailing address: Street or P.O. Box #7 Mobile Avenue

City Sauget State IL ZIP 62201 - 1069

Contact person: Douglas Harris Title General Manager

Telephone ( 618 ) 271 - 2804 Ext.         

Facsimile ( 618 ) 271 - 2128

**B. Facility Location**

Temporary source?      Yes   X   No Plant site location #7 Mobile Avenue

City Sauget State IL County St. Clair EPA Region 5

Is the facility located within:

Indian lands?      YES   X   NO OCS waters?      YES   X   NO

Non-attainment area?   X   YES      NO If yes, for what air pollutants? Ozone, PM2.5

Within 50 miles of affected State?   X   YES      NO If yes, What State(s)? MO

**C. Owner**

Name Veolia ES Technical Solutions Street/P.O. Box 700 East Butterfield Road, Suite 201

City Lombard State IL ZIP 60148 -         

Telephone ( 630 ) 218 - 1756 Ext         

**D. Operator**

Name Veolia ES Technical Solutions Street/P.O. Box #7 Mobile Avenue

City Sauget State IL ZIP 62201 - 1069

Telephone ( 618 ) 271 - 2804 Ext

GIS

2

**E. Application Type**

Mark only one permit application type and answer the supplementary question appropriate for the type marked.

☐ Initial Permit    ☒ Renewal    ☐ Significant Mod    ☐ Minor Permit Mod(MPM)

☐ Group Processing, MPM    ☐ Administrative Amendment

For initial permits, when did operations commence? \_\_\_\_ / \_\_\_\_ / \_\_\_\_

For permit renewal, what is the expiration date of current permit? 10 / 12 / 2013

**F. Applicable Requirement Summary**

Mark all types of applicable requirements that apply.

☒ SIP    ☐ FIP/TIP    ☐ PSD    ☐ Non-attainment NSR

☒ Minor source NSR    ☐ Section 111    ☐ Phase I acid rain    ☐ Phase II acid rain

☐ Stratospheric ozone    ☐ OCS regulations    ☒ NESHAP    ☐ Sec. 112(d) MACT

☐ Sec. 112(g) MACT    ☐ Early reduction of HAP    ☐ Sec 112(j) MACT    ☐ RMP [Sec.112(r)]

☐ Tank Vessel requirements, sec. 183(f))    ☐ Section 129 Standards/Requirement

☐ Consumer / comm.. products, § 183(e)    ☐ NAAQS, increments or visibility (temp. sources)

Has a risk management plan been registered? ☐ YES ☐ NO    Regulatory agency \_\_\_\_\_

Phase II acid rain application submitted? ☐ YES ☒ NO    If yes, Permitting authority \_\_\_\_\_

**G. Source-Wide PTE Restrictions and Generic Applicable Requirements**

Cite and describe any emissions-limiting requirements and/or facility-wide "generic" applicable requirements.

40 CFR 71.6(a)(3)(ii) General Part 71 Recordkeeping.

40 CFR 71.6(a)(3)(iii) General Part 71 Reporting.

40 CFR 71.6(a)(3)(I) Performance Testing Facilities Provided.

35 IAC 212.301 Fugitive particulate emissions beyond the property line prohibited.

35 IAC 237.102 Open burning is prohibited except as provided by regulation.

35 IAC 212.123(a) Opacity is limited to less than 30% from any emission unit unless subject to other requirements.

40 CFR Part 82 Standards for recycling and emissions reduction of ozone depleting substances.

35 IAC 244 Subpart C Maintain onsite a written Episode Action Plan.

40 CFR 61 Subpart FF Calculation of total annual benzene quantity and any applicable requirements as indicated.

GIS

3

**H. Process Description**

List processes, products, and SIC codes for the facility.

Process	Products	SIC
Refuse Systems	Not applicable	4953

**I. Emission Unit Identification**

Assign an emissions unit ID and describe each emissions unit at the facility. Control equipment and/or alternative operating scenarios associated with emissions units should be listed on a separate line. Applicants may exclude from this list any insignificant emissions units or activities.

Emissions Unit ID	Description of Unit
Incineration Unit #2	Fixed Hearth Incinerator with Maximum Heat Capacity of 16 mmBtu/hr.
SDA-2	Spray Dryer Absorber air pollution control device for Unit #2.
BH-2	Fabric Filter air pollution control device for Unit #2.
Incineration Unit #3	Fixed Hearth Incinerator with Maximum Heat Capacity of 16 mmBtu/hr.
SDA-3	Spray Dryer Absorber air pollution control device for Unit #3.
BH-3	Fabric Filter air pollution control device for Unit #3.
Incineration Unit #4	Rotary Kiln Incinerator (transportable) with Maximum Heat Capacity of 50 mmBtu/hr.
	Tempering Chamber for Unit #4.
	Activated Carbon Injection in Unit #4.
SDA-4	Spray Dryer Absorber air pollution control device for Unit #4.
BH-4	Fabric Filter air pollution control device for Unit #4.
Material Processing Area #1 (MP-1)	Waste Processing Areas #1 for processing/packaging of waste and repackaging of containerized waste.
Material Processing Area #2 (MP-2)	Waste Processing Areas #2 for processing/packaging of waste and repackaging of containerized waste.
	Activated Carbon Absorption pollution control device for MP-2.
Lab Pack Repack Area	Waste Processing processing/packaging and repackaging of lab pack wastes.
Drum Crusher	Empty drums are crushed in a three-sided partial enclosure.
Storage Tanks for Liquid Wastes and #2 Fuel Oil	Tanks: #2 (4,391 gals.), #4 (4,931 gals.), #6 (7,200 gals.), #8 (5,820 gals.), #10 (12,869 gals.), #20 (12,869 gals.), #30 (12,869 gals.), #40 (12,869 gals.), #50 (12,869 gals.), #60 (12,869 gals.), #300 (19,850 gals.), #302 (30,000 gals.), #304 (30,000 gals.), #306 (30,000 gals.), #308 (30,000 gals.), #310 (30,000 gals.), #312 (10,000 gals.), #314 (10,000 gals.).
	Activated Carbon Absorption pollution control devices for Storage Tank Vents.
Storage Tank for #2 Fuel Oil	Tank #390 (30,000 gals.).

GIS

4

Bulk Feed Building	Temporary storage of bulk solid wastes before being fed to Incineration Unit #4.
BF Bldg - CA	Activated Carbon Absorption System pollution control devices for Bulk Feed Building.
BF Bldg – BH-1	Baghouse with cyclone precleaner air pollution control devices for Bulk Feed Building.
Boiler #1	Natural gas-fired Boiler with Maximum Heat Capacity of 10.6 mmBtu/hr used for generating steam for the facility.
<u>EGEN1, EGEN2</u>	<u>#2 Fuel oil-fired Emergency Generators with Maximum Heat Capacity of 0.40 mmBtu/hr.</u>
Fugitive Emissions	Pumps, valves, open-end lines and compressors.

GIS

5

**J. Facility Emissions Summary**

Enter potential to emit (PTE) for the facility as a whole for each air pollutant listed below. Enter the name of the single HAP emitted in the greatest amount and its PTE. For all pollutants stipulations to major source status may be indicated by entering "major" in the space for PTE. Indicate the total actual emissions for fee purposes for the facility in the space provided. Applications for permit modifications need not include actual emissions information.

NOx 74.11 tons/yr VOC 23.54 tons/yr SO2 67.19 tons/yrPM-10 14.87 tons/yr CO 30.85 tons/yr Lead 0.1137 tons/yrTotal HAP 32.62 tons/yrSingle HAP emitted in the greatest amount Benzene PTE 0.38 tons/yrTotal of regulated pollutants (for fee calculation), Sec. F, line 5 of form FEE N/A tons/yr**K. Existing Federally-Enforceable Permits**Permit number(s) V-IL-1716300103-08-01 Permit type Title V Permitting authority EPA

Permit number(s) \_\_\_\_\_ Permit type \_\_\_\_\_ Permitting authority \_\_\_\_\_

**L. Emission Unit(s) Covered by General Permits**Emission unit(s) subject to general permit Not applicableCheck one:    Application made    Coverage grantedGeneral permit identifier \_\_\_\_\_ Expiration Date    /    /   **M. Cross-referenced Information**Does this application cross-reference information?   X   YES    NO (If yes, see instructions)



United States  
Environmental Protection  
Agency

OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**INSIGNIFICANT EMISSIONS (IE)**

On this page list each insignificant activity or emission unit. In the "number" column, indicate the number of units in this category. Descriptions should be brief but unique. Indicate which emissions criterion of part 71 is the basis for the exemption.

Number	Description of Activities or Emissions Units	RAP, except HAP	HAP
1	2.5 mmBtu/hr Tioga portable boiler	✓	
1	Ash Handling	✓	
1	Handling of Spent Dry Scrubber Solids	✓	
1	Lime Unloading and Proportioning	✓	
1	Gasoline Storage Tank	✓	
1	Diesel Fuel Storage Tank	✓	
1	Kerosene Storage Tank	✓	
1	Use of Absorbent Material	✓	
1	General Vehicle Maintenance and Servicing (assumed to include diesel fuel handling)	✓	
1	Laboratory	✓	
1	Piping and Storage System for Natural Gas	✓	
1	Non-halogenated Cold Cleaning Degreasers	✓	
1	Internal Combustion Engines in Motor Vehicles	✓	
N/A	Storage and Handling of Closed Drums	✓	





OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSION UNIT DESCRIPTION FOR FUEL COMBUSTION SOURCES (EUD-1)****A. General Information**Emissions unit ID Incineration Unit #2 Description Fixed Hearth Incinerator (16 mmBtu/hr)SIC Code (4-digit) 4953 SCC Code 50300101**B. Emissions Unit Description**Primary use Hazardous Waste Incineration Temporary Source ☐ Yes ☒ NoManufacturer Trade Waste Incineration, Inc. Model No. TWI-2000, Series 2Serial Number NA Installation Date 9 /  / 1986Boiler Type: ☐ Industrial boiler ☐ Process burner ☐ Electric utility boiler☒ Other (describe) IncineratorBoiler horsepower rating NA Boiler steam flow (lb/hr) NA

Type of Fuel-Burning Equipment (coal burning only):

☐ Hand fired ☐ Spreader stoker ☐ Underfeed stoker ☐ Overfeed stoker☐ Traveling grate ☐ Shaking grate ☐ Pulverized, wet bed ☐ Pulverized, dry bedActual Heat Input  MM BTU/hr Max. Design Heat Input  MM BTU/hr

EUD-1

2

**C. Fuel Data**Primary fuel type(s) Natural Gas Standby fuel type(s) \_\_\_\_\_

Describe each fuel you expected to use during the term of the permit.

Fuel Type	Max. Sulfur Content (%)	Max. Ash Content (%)	BTU Value (cf, gal., or lb.)
Natural Gas	NA	NA	1050 BTU/cf

**D. Fuel Usage Rates**

Fuel Type	Annual Actual Usage	Maximum Usage	
		Hourly	Annual
Natural Gas	52 mmcft	0.0152	133 mmcft

**E. Associated Air Pollution Control Equipment**

Emissions unit ID SDA-2 Device type Spray Dryer Absorber

Air pollutant(s) Controlled HCl and SO<sub>2</sub> Manufacturer Joy-Niro

Model No. Custom Serial No. \_\_\_\_\_

Installation date 9 /     / 1986 Control efficiency (%) 99%

Efficiency estimation method Performance Test

**E. Associated Air Pollution Control Equipment**

Emissions unit ID BH-2 Device type Baghouse r \_\_\_\_\_

Air pollutant(s) Controlled PM/PM10/Lead Manufacturer Pulse Flo

Model No. Custom Serial No. \_\_\_\_\_

Installation date 9 /     / 1986 Control efficiency (%) < 0.08 grains

EUD-1

3

Efficiency estimation method Performance Test

**F. Ambient Impact Assessment** Not Applicable.

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) \_\_\_\_\_ Inside stack diameter (ft) \_\_\_\_\_  
Stack temp(°F) \_\_\_\_\_ Design stack flow rate (ACFM) \_\_\_\_\_  
Actual stack flow rate (ACFM) \_\_\_\_\_ Velocity (ft/sec) \_\_\_\_\_



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSION UNIT DESCRIPTION FOR FUEL COMBUSTION SOURCES (EUD-1)****A. General Information**Emissions unit ID Incineration Unit #3 Description Fixed Hearth Incinerator (16 mmBtu/hr)SIC Code (4-digit) 4953 SCC Code 50300101**B. Emissions Unit Description**Primary use Hazardous Waste Incineration Temporary Source ☐ Yes ☒ NoManufacturer Trade Waste Incineration, Inc. Model No. TWI-2000, Series 2Serial Number NA Installation Date 9 /     / 1986Boiler Type: ☐ Industrial boiler ☐ Process burner ☐ Electric utility boiler☒ Other (describe) IncineratorBoiler horsepower rating NA Boiler steam flow (lb/hr) NA

Type of Fuel-Burning Equipment (coal burning only):

☐ Hand fired ☐ Spreader stoker ☐ Underfeed stoker ☐ Overfeed stoker☐ Traveling grate ☐ Shaking grate ☐ Pulverized, wet bed ☐ Pulverized, dry bedActual Heat Input            MM BTU/hr Max. Design Heat Input            MM BTU/hr

EUD-1

2

**C. Fuel Data**Primary fuel type(s) Natural Gas Standby fuel type(s) \_\_\_\_\_

Describe each fuel you expected to use during the term of the permit.

Fuel Type	Max. Sulfur Content (%)	Max. Ash Content (%)	BTU Value (cf, gal., or lb.)
Natural Gas	NA	NA	1050 BTU/cf

**D. Fuel Usage Rates**

Fuel Type	Annual Actual Usage	Maximum Usage	
		Hourly	Annual
Natural Gas	64 mmcft	0.0095	83 mmcft

**E. Associated Air Pollution Control Equipment**

Emissions unit ID SDA-3 Device type Spray Dryer Absorber

Air pollutant(s) Controlled HCl and SO<sub>2</sub> Manufacturer Joy-Niro

Model No. Custom Serial No. \_\_\_\_\_

Installation date 9 /     / 1986 Control efficiency (%) 99%

Efficiency estimation method Performance Test

**E. Associated Air Pollution Control Equipment**

Emissions unit ID BH-3 Device type Baghouse

Air pollutant(s) Controlled PM/PM<sub>10</sub>/Lead Manufacturer Pulse Flo

Model No. Custom Serial No. \_\_\_\_\_

Installation date 9 /     / 1986 Control efficiency (%) < 0.08 grains

EUD-1

3

Efficiency estimation method Performance Test**F. Ambient Impact Assessment** Not Applicable.

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) \_\_\_\_\_ Inside stack diameter (ft) \_\_\_\_\_

Stack temp(°F) \_\_\_\_\_ Design stack flow rate (ACFM) \_\_\_\_\_

Actual stack flow rate (ACFM) \_\_\_\_\_ Velocity (ft/sec) \_\_\_\_\_



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSION UNIT DESCRIPTION FOR FUEL COMBUSTION SOURCES (EUD-1)****A. General Information**Emissions unit ID Incineration Unit #4, Description Rotary Kiln (50 mmBtu/hr).SIC Code (4-digit) 4953, SCC Code 50300101.**B. Emissions Unit Description**Primary use Hazardous Waste Incineration, Temporary Source ☐ Yes ☒ NoManufacturer International Waste Energy, Model No. PY\*ROXSerial Number NA, Installation Date 9 /  / 1986Boiler Type: ☐ Industrial boiler ☐ Process burner ☐ Electric utility boiler☒ Other (describe) IncineratorBoiler horsepower rating NA, Boiler steam flow (lb/hr) NA

Type of Fuel-Burning Equipment (coal burning only):

☐ Hand fired ☐ Spreader stoker ☐ Underfeed stoker ☐ Overfeed stoker☐ Traveling grate ☐ Shaking grate ☐ Pulverized, wet bed ☐ Pulverized, dry bedActual Heat Input  MM BTU/hr Max. Design Heat Input  MM BTU/hr

EUD-1

2

**C. Fuel Data**Primary fuel type(s) Natural Gas Standby fuel type(s) \_\_\_\_\_

Describe each fuel you expected to use during the term of the permit.

Fuel Type	Max. Sulfur Content (%)	Max. Ash Content (%)	BTU Value (cf, gal., or lb.)
Natural Gas	NA	NA	1050 BTU/cf

**D. Fuel Usage Rates**

Fuel Type	Annual Actual Usage	Maximum Usage	
		Hourly	Annual
Natural Gas	137 mmcf	0.0152	133.5 mmcf

**E. Associated Air Pollution Control Equipment**Emissions unit ID SDA-4 Device type Spray Dryer AbsorberAir pollutant(s) Controlled HCl and SO2 Manufacturer \_\_\_\_\_

Model No. \_\_\_\_\_ Custom \_\_\_\_\_ Serial No. \_\_\_\_\_

Installation date 6 /     / 1988 Control efficiency (%) 99%Efficiency estimation method Performance Test**E. Associated Air Pollution Control Equipment**Emissions unit ID BH-4 Device type BaghouseAir pollutant(s) Controlled PM/PM10/Lead Manufacturer Wheelabrator

Model No. \_\_\_\_\_ Custom \_\_\_\_\_ Serial No. \_\_\_\_\_

Installation date 6 /     / 1988 Control efficiency (%) 99%



EUD-1

3

Efficiency estimation method Performance Test

**F. Ambient Impact Assessment** Not Applicable.

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) \_\_\_\_\_ Inside stack diameter (ft) \_\_\_\_\_  
Stack temp(°F) \_\_\_\_\_ Design stack flow rate (ACFM) \_\_\_\_\_  
Actual stack flow rate (ACFM) \_\_\_\_\_ Velocity (ft/sec) \_\_\_\_\_



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSION UNIT DESCRIPTION FOR FUEL COMBUSTION SOURCES (EUD-1)****A. General Information**Emissions unit ID EGEN1 Description Emergency Generator  $\leq$  112 kW (150.2 HP)

SIC Code (4-digit) \_\_\_\_\_ SCC Code \_\_\_\_\_

**B. Emissions Unit Description**Primary use Emergency Power for Plant Operations Temporary Source ☐ Yes ☒ No

Manufacturer \_\_\_\_\_ Model No. \_\_\_\_\_

Serial Number \_\_\_\_\_ Installation Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Boiler Type: ☐ Industrial boiler ☐ Process burner ☐ Electric utility boiler

Other (describe) \_\_\_\_\_

Boiler horsepower rating \_\_\_\_\_ Boiler steam flow (lb/hr) \_\_\_\_\_

Type of Fuel-Burning Equipment (coal burning only):

☐ Hand fired ☐ Spreader stoker ☐ Underfeed stoker ☐ Overfeed stoker☐ Traveling grate ☐ Shaking grate ☐ Pulverized, wet bed ☐ Pulverized, dry bed

Actual Heat Input \_\_\_\_\_ MM BTU/hr Max. Design Heat Input \_\_\_\_\_ MM BTU/hr

EUD-1

2

**C. Fuel Data**Primary fuel type(s) Diesel Fuel Standby fuel type(s) \_\_\_\_\_

Describe each fuel you expected to use during the term of the permit.

Fuel Type	Max. Sulfur Content (%)	Max. Ash Content (%)	BTU Value (cf, gal., or lb.)
Diesel Fuel	0.05		0.0137 MMBtu/gal

**D. Fuel Usage Rates**

Fuel Type	Annual Actual Usage	Maximum Usage	
		Hourly	Annual
Diesel Fuel		28 gallons	13,960 gallons

**E. Associated Air Pollution Control Equipment**

Emissions unit ID <u>None</u> Device type _____	
Air pollutant(s) Controlled _____ Manufacturer _____	
Model No. _____	Serial No. _____
Installation date ____/____/____ Control efficiency (%) _____	
Efficiency estimation method _____	

EUD-1

3

**F. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) <u>NA</u>	Inside stack diameter (ft) _____
Stack temp(°F) _____	Design stack flow rate (ACFM) _____
Actual stack flow rate (ACFM) _____	Velocity (ft/sec) _____



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSION UNIT DESCRIPTION FOR FUEL COMBUSTION SOURCES (EUD-1)****A. General Information**Emissions unit ID EGEN2 Description Emergency Generator  $\leq$  112 kW (150.2 HP)

SIC Code (4-digit) \_\_\_\_\_ SCC Code \_\_\_\_\_

**B. Emissions Unit Description**Primary use Emergency Fire Water Pump Temporary Source ☐ Yes ☒ No

Manufacturer \_\_\_\_\_ Model No. \_\_\_\_\_

Serial Number \_\_\_\_\_ Installation Date     /     /    Boiler Type: ☐ Industrial boiler ☐ Process burner ☐ Electric utility boiler

Other (describe) \_\_\_\_\_

Boiler horsepower rating \_\_\_\_\_ Boiler steam flow (lb/hr) \_\_\_\_\_

Type of Fuel-Burning Equipment (coal burning only):

☐ Hand fired ☐ Spreader stoker ☐ Underfeed stoker ☐ Overfeed stoker☐ Traveling grate ☐ Shaking grate ☐ Pulverized, wet bed ☐ Pulverized, dry bed

Actual Heat Input \_\_\_\_\_ MM BTU/hr Max. Design Heat Input \_\_\_\_\_ MM BTU/hr

EUD-1

2

**C. Fuel Data**Primary fuel type(s) Diesel Fuel Standby fuel type(s) \_\_\_\_\_

Describe each fuel you expected to use during the term of the permit.

Fuel Type	Max. Sulfur Content (%)	Max. Ash Content (%)	BTU Value (cf, gal., or lb.)
Diesel Fuel	0.05		0.0137 MMBtu/gal

**D. Fuel Usage Rates**

Fuel Type	Annual Actual Usage	Maximum Usage	
		Hourly	Annual
Diesel Fuel		28 gallons	13,960 gallons

**E. Associated Air Pollution Control Equipment**Emissions unit ID None Device type \_\_\_\_\_

Air pollutant(s) Controlled \_\_\_\_\_ Manufacturer \_\_\_\_\_

Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_

Installation date \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Control efficiency (%) \_\_\_\_\_

Efficiency estimation method \_\_\_\_\_

EUD-1

3

**F. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) <u>NA</u>	Inside stack diameter (ft) _____
Stack temp(°F) _____	Design stack flow rate (ACFM) _____
Actual stack flow rate (ACFM) _____	Velocity (ft/sec) _____



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)****A. General Information**Emissions unit ID Bulk Feed Bldg (BF Bldg), Description Temporary Storage in pits prior to feeding into Incineration Unit #4SIC Code (4-digit) 4953, SCC Code 50300830**B. Emissions Unit Description**Equipment type NA, Temporary Source Yes ☒ NoManufacturer NA, Model No. NASerial Number \_\_\_\_\_, Installation Date 5 /     / 1988

Articles being coated or degreased \_\_\_\_\_

Application method \_\_\_\_\_

Overspray (surface coating) (%) \_\_\_\_\_, Drying method \_\_\_\_\_

No. of dryers \_\_\_\_\_, Tank capacity (degreasers) (gal) \_\_\_\_\_

**C. Associated Air Pollution Control Equipment**Emissions unit ID BF Bldg. BH-1, Device type Baghouse,  
Manufacturer Airtol Inc., Model No. 49ASO7Serial Number \_\_\_\_\_, Installation Date 11 /     / 1988

Control efficiency (%) \_\_\_\_\_, Capture efficiency (%) \_\_\_\_\_

Air pollutant(s) controlled PM/PM10, Efficiency estimation method \_\_\_\_\_**C. Associated Air Pollution Control Equipment**Emissions unit ID BF Bldg. CA, Device type Activated Carbon Adsorption System,  
Manufacturer \_\_\_\_\_, Model No. \_\_\_\_\_Serial Number \_\_\_\_\_, Installation Date 11 /     / 1988

Control efficiency (%) \_\_\_\_\_, Capture efficiency (%) \_\_\_\_\_

Air pollutant(s) controlled VOM, Efficiency estimation method \_\_\_\_\_**D. Ambient Impact Assessment**



EUD-2

2

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) 70 Inside stack diameter (ft) \_\_\_\_\_

Stack temp (F) ambient Design stack flow rate (ACFM) 5,000

Actual stack flow rate (ACFM) 2,500 Velocity (ft/sec) \_\_\_\_\_

### E. VOC-containing Substance Data

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)****A. General Information**Emissions unit ID Drum Crusher Description CrusherSIC Code (4-digit) 4953 SCC Code 30180001**B. Emissions Unit Description**Equipment type Crusher with hopper Temporary Source ☐ Yes ☒ NoManufacturer Custom Built Model No. NASerial Number \_\_\_\_\_ Installation Date 5 /   / 1988

Articles being coated or degreased \_\_\_\_\_

Application method \_\_\_\_\_

Overspray (surface coating) (%) \_\_\_\_\_ Drying method \_\_\_\_\_

No. of dryers \_\_\_\_\_ Tank capacity (degreasers) (gal) \_\_\_\_\_

**C. Associated Air Pollution Control Equipment**Emissions unit ID None Device type \_\_\_\_\_

Manufacturer \_\_\_\_\_ Model No. \_\_\_\_\_

Serial Number \_\_\_\_\_ Installation Date   /   /  

Control efficiency (%) \_\_\_\_\_ Capture efficiency (%) \_\_\_\_\_

Air pollutant(s) controlled \_\_\_\_\_ Efficiency estimation method \_\_\_\_\_

**D. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) \_\_\_\_\_ Inside stack diameter (ft) \_\_\_\_\_

Stack temp (F) \_\_\_\_\_ Design stack flow rate (ACFM) \_\_\_\_\_

Actual stack flow rate (ACFM) \_\_\_\_\_ Velocity (ft/sec) \_\_\_\_\_

EUD-2

2

**E. VOC-containing Substance Data**

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

## EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)

### A. General Information

Emissions unit ID Lab Pack Repack Area, Description Repacking of Lab Pack Waste

SIC Code (4-digit) 4953 SCC Code 30180001

### B. Emissions Unit Description

Equipment type Opening containers/ transfer to containers. Temporary Source \_\_\_ Yes **X** No

Manufacturer NA Model No. NA

Serial Number NA \_\_\_\_\_, Installation Date \_\_\_\_/\_\_\_\_/1988

Articles being coated or degreased \_\_\_\_\_

Application method

Overspray (surface coating) (%) \_\_\_\_\_ Drying method \_\_\_\_\_

No. of dryers \_\_\_\_\_ Tank capacity (degreasers) (gal) \_\_\_\_\_

### C. Associated Air Pollution Control Equipment

Emissions unit ID None, Device type

Manufacturer	Model No
--------------	----------

Serial No. \_\_\_\_\_ Installation date \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Control efficiency (%) \_\_\_\_\_ . Capture efficiency (%) \_\_\_\_\_ .

Air pollutant(s) controlled \_\_\_\_\_ Efficiency estimation method \_\_\_\_\_

**D. Ambient Impact Assessment** Not Applicable

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) \_\_\_\_\_ Inside stack diameter (ft) \_\_\_\_\_

Stack temp (F) \_\_\_\_\_ Design stack flow rate (ACFM) \_\_\_\_\_

Actual stack flow rate (ACFM) \_\_\_\_\_ Velocity (ft/sec) \_\_\_\_\_.

### E. VOC-containing Substance Data

EUD-2

2

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						

OMB No. 2060-0336, Approval Expires 06/30/2015

### EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)

SIC Code (4-digit) 4953 SCC Code 50300810

No. of dryers                      Tank capacity (degreasers) (gal) \_\_\_\_\_

Air pollutant(s) controlled \_\_\_\_\_ Efficiency estimation method \_\_\_\_\_

Actual stack flow rate (ACFM) \_\_\_\_\_ Velocity (ft/sec) \_\_\_\_\_.

## EPA Form 5900-81

EUD-2

2

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

### EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)

### A. General Information

Emissions unit ID Material Processing Area #2 (MP-2). Description Processing/Repacking Waste.

SIC Code (4-digit) 4953, SCC Code 50300810

### B. Emissions Unit Description

Equipment type Opening containers/ transfer to containers. Temporary Source \_\_\_ Yes **X** No

Manufacturer NA Model No. NA

Serial Number NA Installation Date     /    /1988

Articles being coated or degreased \_\_\_\_\_

Application method \_\_\_\_\_

Overspray (surface coating) (%) \_\_\_\_\_ Drying method \_\_\_\_\_

No. of dryers \_\_\_\_\_ Tank capacity (degreasers) (gal) \_\_\_\_\_

### C. Associated Air Pollution Control Equipment

Emissions unit ID None, Device type

Manufacturer	Model No

Serial No. \_\_\_\_\_ Installation date \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Control efficiency (%) . . . . . Capture efficiency (%)\_\_\_\_\_

Air pollutant(s) controlled \_\_\_\_\_ Efficiency estimation method \_\_\_\_\_

**D. Ambient Impact Assessment** Not Applicable

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) \_\_\_\_\_ Inside stack diameter (ft) \_\_\_\_\_

Stack temp (F) \_\_\_\_\_ Design stack flow rate (ACFM) \_\_\_\_\_

Actual stack flow rate (ACFM) \_\_\_\_\_ Velocity (ft/sec) \_\_\_\_\_.

### E. VOC-containing Substance Data



EUD-2

2

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSION UNIT DESCRIPTION FOR FUEL COMBUSTION SOURCES (EUD-1)****A. General Information**Emissions unit ID Boiler #1 Description Boiler for Steam GenerationSIC Code (4-digit) 4953 SCC Code 10300602**B. Emissions Unit Description**Primary use Steam Generation/Fuel Combustion Temporary Source Yes ☒ NoManufacturer Cleaver Brooks Model No. 250Serial Number NA Installation Date 11 /  / 1995Boiler Type: ☒ Industrial boiler ☐ Process burner ☐ Electric utility boiler☐ Other (describe) \_\_\_\_\_

Boiler horsepower rating \_\_\_\_\_ Boiler steam flow (lb/hr) \_\_\_\_\_

Type of Fuel-Burning Equipment (coal burning only):

☐ Hand fired ☐ Spreader stoker ☐ Underfeed stoker ☐ Overfeed stoker☐ Traveling grate ☐ Shaking grate ☐ Pulverized, wet bed ☐ Pulverized, dry bedActual Heat Input 10.6 MM BTU/hr Max. Design Heat Input 10.6 MM BTU/hr

EUD-1

2

**C. Fuel Data**Primary fuel type(s) Natural Gas Standby fuel type(s) \_\_\_\_\_

Describe each fuel you expected to use during the term of the permit.

Fuel Type	Max. Sulfur Content (%)	Max. Ash Content (%)	BTU Value (cf, gal., or lb.)
Natural Gas	NA	NA	1050 BTU/cf

**D. Fuel Usage Rates**

Fuel Type	Annual Actual Usage	Maximum Usage	
		Hourly	Annual
Natural Gas	13 mmcf	0.0095	83.43 mmcf

**E. Associated Air Pollution Control Equipment**

Emissions unit ID None Device type \_\_\_\_\_

Air pollutant(s) Controlled \_\_\_\_\_ Manufacturer \_\_\_\_\_

Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_

Installation date \_\_\_\_/\_\_\_\_/\_\_\_\_ Control efficiency (%) \_\_\_\_\_

Efficiency estimation method \_\_\_\_\_

**E. Associated Air Pollution Control Equipment**

Emissions unit ID \_\_\_\_\_ Device type \_\_\_\_\_

Air pollutant(s) Controlled \_\_\_\_\_ Manufacturer \_\_\_\_\_

Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_

Installation date \_\_\_\_/\_\_\_\_/\_\_\_\_ Control efficiency (%) \_\_\_\_\_

Efficiency estimation method \_\_\_\_\_

EUD-1

3

Efficiency estimation method  
\_\_\_\_\_**F. Ambient Impact Assessment** Not Applicable.

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) _____	Inside stack diameter (ft) _____
Stack temp(°F) _____	Design stack flow rate (ACFM) _____
Actual stack flow rate (ACFM) _____	Velocity (ft/sec) _____



OMB No. 2060-0336, Approval Expires 06/30/2015

## Federal Operating Permit Program (40 CFR Part 71)

**EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)****A. General Information**Emissions unit ID Tank #2, Description 4,931 gallon capacitySIC Code (4-digit) 4953, SCC Code 30199998**B. Emissions Unit Description**Equipment type Liquid Storage Tank, Temporary Source Yes ☒ NoManufacturer Modern Welding, Model No. NASerial Number S-4869-TK2, Installation Date 4 /   / 2002Articles being coated or degreased  Application method  Overspray (surface coating) (%)  , Drying method  No. of dryers  , Tank capacity (degreasers) (gal)  **C. Associated Air Pollution Control Equipment**Emissions unit ID CC #2, Device type Activated Carbon CanisterManufacturer TIGG Corporation, Model No. N-100XP or equivalentSerial Number NA, Installation Date 4 /   / 2002Control efficiency (%) 95-98%, Capture efficiency (%) 100%Air pollutant(s) controlled VOM/Organic HAP, Efficiency estimation method Mfg. Info.**D. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

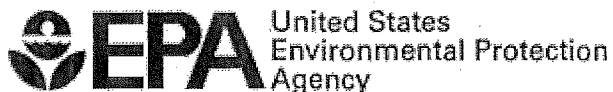
Stack height (ft) 4, Inside stack diameter (ft) 0.33Stack temp (F) 62.4, Design stack flow rate (ACFM) 100Actual stack flow rate (ACFM) < 100, Velocity (ft/sec)  **E. VOC-containing Substance Data**

EUD-2

2

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)****A. General Information**Emissions unit ID Tank #4, Description 4.931 gallon capacitySIC Code (4-digit) 4953, SCC Code 30199998**B. Emissions Unit Description**Equipment type Liquid Storage Tank, Temporary Source Yes ☒ NoManufacturer Modern Welding, Model No. NASerial Number S-4869-TK4, Installation Date 4 /   / 2002Articles being coated or degreased  Application method  Overspray (surface coating) (%)  , Drying method  No. of dryers  , Tank capacity (degreasers) (gal)  **C. Associated Air Pollution Control Equipment**Emissions unit ID CC #4, Device type Activated Carbon CanisterManufacturer TIGG Corporation, Model No. N-100XP or equivalentSerial Number NA, Installation Date 4 /   / 2002Control efficiency (%) 95-98%, Capture efficiency (%) 100%Air pollutant(s) controlled VOM/Organic HAP, Efficiency estimation method Mfg. Info.**D. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) 4, Inside stack diameter (ft) 0.33Stack temp (F) 62.4, Design stack flow rate (ACFM) 100Actual stack flow rate (ACFM) < 100, Velocity (ft/sec)  **E. VOC-containing Substance Data**

EUD-2

2

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						





OMB No. 2060-0336, Approval Expires 06/30/2015

## Federal Operating Permit Program (40 CFR Part 71)

**EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)****A. General Information**Emissions unit ID Tank #6 Description 7,200 gallon capacitySIC Code (4-digit) 4953 SCC Code 30199998**B. Emissions Unit Description**Equipment type Liquid Storage Tank Temporary Source ☐ Yes ☒ NoManufacturer Modern Welding Model No. NASerial Number S-4869-TK6 Installation Date 5 /  / 1988Articles being coated or degreased Application method Overspray (surface coating) (%)  Drying method No. of dryers  Tank capacity (degreasers) (gal) **C. Associated Air Pollution Control Equipment**Emissions unit ID CC #6 Device type Activated Carbon CanisterManufacturer TIGG Corporation Model No. N-100XP or equivalentSerial Number NA Installation Date 5 /  / 1988Control efficiency (%) 95-98% Capture efficiency (%) 100%Air pollutant(s) controlled VOM/Organic HAP Efficiency estimation method Mfg. Info.**D. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) 4 Inside stack diameter (ft) 0.33Stack temp (F) 62.4 Design stack flow rate (ACFM) 100Actual stack flow rate (ACFM) < 100 Velocity (ft/sec) **E. VOC-containing Substance Data**

EUD-2

2

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						



OMB No. 2060-0336, Approval Expires 06/30/2015

## Federal Operating Permit Program (40 CFR Part 71)

**EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)****A. General Information**Emissions unit ID Tank #8, Description 5,280 gallon capacitySIC Code (4-digit) 4953, SCC Code 30199998**B. Emissions Unit Description**Equipment type Liquid Storage Tank, Temporary Source Yes ☒ NoManufacturer Modern Welding, Model No. NASerial Number S-4869-TK8, Installation Date 5 /   / 1988Articles being coated or degreased  Application method  Overspray (surface coating) (%)  , Drying method  No. of dryers  , Tank capacity (degreasers) (gal)  **C. Associated Air Pollution Control Equipment**Emissions unit ID CC #8, Device type Activated Carbon CanisterManufacturer TIGG Corporation, Model No. N-100XP or equivalentSerial Number NA, Installation Date 5 /   / 1988Control efficiency (%) 95-98%, Capture efficiency (%) 100%Air pollutant(s) controlled VOM/Organic HAP, Efficiency estimation method Mfg. Info.**D. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) 4, Inside stack diameter (ft) 0.33Stack temp (F) 62.4, Design stack flow rate (ACFM) 100Actual stack flow rate (ACFM) < 100, Velocity (ft/sec)  **E. VOC-containing Substance Data**

EUD-2

2

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)****A. General Information**Emissions unit ID Tank #10 Description 12,869 gallon capacitySIC Code (4-digit) 4953 SCC Code 30199998**B. Emissions Unit Description**Equipment type Liquid Storage Tank Temporary Source ☐ Yes ☒ NoManufacturer Modern Welding Model No. NASerial Number S-4869-TK10 Installation Date 6 /  / 2004Articles being coated or degreased Application method Overspray (surface coating) (%)  Drying method No. of dryers  Tank capacity (degreasers) (gal) **C. Associated Air Pollution Control Equipment**Emissions unit ID CC #10 Device type Activated Carbon CanisterManufacturer TIGG Corporation Model No. N-100XP or equivalentSerial Number NA Installation Date 6 /  / 2004Control efficiency (%) 95-98% Capture efficiency (%) 100%Air pollutant(s) controlled VOM/Organic HAP Efficiency estimation method Mfg. Info.**D. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) 4 Inside stack diameter (ft) 0.33Stack temp (F) 62.4 Design stack flow rate (ACFM) 100Actual stack flow rate (ACFM) < 100 Velocity (ft/sec) **E. VOC-containing Substance Data**

EUD-2

2

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)****A. General Information**Emissions unit ID Tank #20, Description 12,869 gallon capacitySIC Code (4-digit) 4953, SCC Code 30199998**B. Emissions Unit Description**Equipment type Liquid Storage Tank, Temporary Source ☐ Yes ☒ NoManufacturer Modern Welding, Model No. NASerial Number S-4869-TK20, Installation Date 6 /  / 2004Articles being coated or degreased Application method Overspray (surface coating) (%) , Drying method No. of dryers , Tank capacity (degreasers) (gal) **C. Associated Air Pollution Control Equipment**Emissions unit ID CC #20, Device type Activated Carbon CanisterManufacturer TIGG Corporation, Model No. N-100XP or equivalentSerial Number NA, Installation Date 6 /  / 2004Control efficiency (%) 95-98%, Capture efficiency (%) 100%Air pollutant(s) controlled VOM/Organic HAP, Efficiency estimation method Mfg. Info.**D. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) 4, Inside stack diameter (ft) 0.33Stack temp (F) 62.4, Design stack flow rate (ACFM) 100Actual stack flow rate (ACFM) < 100, Velocity (ft/sec) **E. VOC-containing Substance Data**

EUD-2

2

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						





OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)****A. General Information**

Emissions unit ID Tank #30 Description 12.869 gallon capacity  
 SIC Code (4-digit) 4953 SCC Code 30199998

**B. Emissions Unit Description**

Equipment type Liquid Storage Tank Temporary Source ☐ Yes ☒ No  
 Manufacturer Modern Welding Model No. NA  
 Serial Number S-4869-TK30 Installation Date 3 /  / 2009  
 Articles being coated or degreased \_\_\_\_\_  
 Application method \_\_\_\_\_  
 Overspray (surface coating) (%) \_\_\_\_\_ Drying method \_\_\_\_\_  
 No. of dryers \_\_\_\_\_ Tank capacity (degreasers) (gal) \_\_\_\_\_

**C. Associated Air Pollution Control Equipment**

Emissions unit ID CC #30 Device type Activated Carbon Canister  
 Manufacturer TIGG Corporation Model No. N-100XP or equivalent  
 Serial Number NA Installation Date 3 /  / 2009  
 Control efficiency (%) 95-98% Capture efficiency (%) 100%  
 Air pollutant(s) controlled VOM/Organic HAP Efficiency estimation method Mfg. Info.

**D. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) 4 Inside stack diameter (ft) 0.33  
 Stack temp (F) 62.4 Design stack flow rate (ACFM) 100  
 Actual stack flow rate (ACFM) < 100 Velocity (ft/sec) \_\_\_\_\_

**E. VOC-containing Substance Data**

EUD-2

2

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)****A. General Information**Emissions unit ID Tank #40 Description 12,869 gallon capacitySIC Code (4-digit) 4953 SCC Code 30199998**B. Emissions Unit Description**Equipment type Liquid Storage Tank Temporary Source ☐ Yes ☒ NoManufacturer Modern Welding Model No. NASerial Number S-4869-TK40 Installation Date 5 /  / 1988Articles being coated or degreased Application method Overspray (surface coating) (%)  Drying method No. of dryers  Tank capacity (degreasers) (gal) **C. Associated Air Pollution Control Equipment**Emissions unit ID CC #40 Device type Activated Carbon CanisterManufacturer TIGG Corporation Model No. N-100XP or equivalentSerial Number NA Installation Date 5 /  / 1988Control efficiency (%) 95-98% Capture efficiency (%) 100%Air pollutant(s) controlled VOM/Organic HAP Efficiency estimation method Mfg. Info.**D. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) 4 Inside stack diameter (ft) 0.33Stack temp (F) 62.4 Design stack flow rate (ACFM) 100Actual stack flow rate (ACFM) < 100 Velocity (ft/sec) **E. VOC-containing Substance Data**

EUD-2

2

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)****A. General Information**Emissions unit ID Tank #50, Description 12.869 gallon capacitySIC Code (4-digit) 4953, SCC Code 30199998**B. Emissions Unit Description**Equipment type Liquid Storage Tank, Temporary Source Yes ☒ NoManufacturer Modern Welding, Model No. NASerial Number S-4869-TK50, Installation Date 5 /   / 1988Articles being coated or degreased  Application method  Overspray (surface coating) (%)  , Drying method  No. of dryers  , Tank capacity (degreasers) (gal)  **C. Associated Air Pollution Control Equipment**Emissions unit ID CC #50, Device type Activated Carbon CanisterManufacturer TIGG Corporation, Model No. N-100XP or equivalentSerial Number NA, Installation Date 5 /   / 1988Control efficiency (%) 95-98%, Capture efficiency (%) 100%Air pollutant(s) controlled VOM/Organic HAP, Efficiency estimation method Mfg. Info.**D. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) 4, Inside stack diameter (ft) 0.33Stack temp (F) 62.4, Design stack flow rate (ACFM) 100Actual stack flow rate (ACFM) < 100, Velocity (ft/sec)  **E. VOC-containing Substance Data**

EUD-2

2

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)****A. General Information**Emissions unit ID Tank #60 Description 12,869 gallon capacitySIC Code (4-digit) 4953 SCC Code 30199998**B. Emissions Unit Description**Equipment type Liquid Storage Tank Temporary Source ☐ Yes ☒ NoManufacturer Modern Welding Model No. NASerial Number S-4869-TK60 Installation Date 5 /  / 1988Articles being coated or degreased Application method Overspray (surface coating) (%)  Drying method No. of dryers  Tank capacity (degreasers) (gal) **C. Associated Air Pollution Control Equipment**Emissions unit ID CC #60 Device type Activated Carbon CanisterManufacturer TIGG Corporation Model No. N-100XP or equivalentSerial Number NA Installation Date 5 /  / 1988Control efficiency (%) 95-98% Capture efficiency (%) 100%Air pollutant(s) controlled VOM/Organic HAP Efficiency estimation method Mfg. Info.**D. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) 4 Inside stack diameter (ft) 0.33Stack temp (F) 62.4 Design stack flow rate (ACFM) 100Actual stack flow rate (ACFM) < 100 Velocity (ft/sec) **E. VOC-containing Substance Data**

EUD-2

2

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						





OMB No. 2060-0336, Approval Expires 06/30/2015

## Federal Operating Permit Program (40 CFR Part 71)

**EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)****A. General Information**

Emissions unit ID Tank #300 Description 30,000 gallon capacity  
 SIC Code (4-digit) 4953 SCC Code 30199998

**B. Emissions Unit Description**

Equipment type Liquid Storage Tank Temporary Source ☐ Yes ☒ No  
 Manufacturer Modern Welding Model No. NA  
 Serial Number S-4869-TK300 Installation Date 5 /  / 1988  
 Articles being coated or degreased \_\_\_\_\_  
 Application method \_\_\_\_\_  
 Overspray (surface coating) (%) \_\_\_\_\_ Drying method \_\_\_\_\_  
 No. of dryers \_\_\_\_\_ Tank capacity (degreasers) (gal) \_\_\_\_\_

**C. Associated Air Pollution Control Equipment**

Emissions unit ID CC #300 Device type Activated Carbon Canister  
 Manufacturer TIGG Corporation Model No. N-100XP or equivalent  
 Serial Number NA Installation Date 5 /  / 1988  
 Control efficiency (%) 95-98% Capture efficiency (%) 100%  
 Air pollutant(s) controlled VOM/Organic HAP Efficiency estimation method Mfg. Info.

**D. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) 4 Inside stack diameter (ft) 0.33  
 Stack temp (F) 62.4 Design stack flow rate (ACFM) 100  
 Actual stack flow rate (ACFM) < 100 Velocity (ft/sec) \_\_\_\_\_

**E. VOC-containing Substance Data**

EUD-2

2

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)****A. General Information**

Emissions unit ID Tank #302 Description 30,000 gallon capacity  
 SIC Code (4-digit) 4953 SCC Code 30199998

**B. Emissions Unit Description**

Equipment type Liquid Storage Tank Temporary Source Yes ☒ No  
 Manufacturer Modern Welding Model No. NA  
 Serial Number S-4869-TK302 Installation Date 5 /  / 1988  
 Articles being coated or degreased \_\_\_\_\_  
 Application method \_\_\_\_\_  
 Overspray (surface coating) (%) \_\_\_\_\_ Drying method \_\_\_\_\_  
 No. of dryers \_\_\_\_\_ Tank capacity (degreasers) (gal) \_\_\_\_\_

**C. Associated Air Pollution Control Equipment**

Emissions unit ID CC #302 Device type Activated Carbon Canister  
 Manufacturer TIGG Corporation Model No. N-100XP or equivalent  
 Serial Number NA Installation Date 5 /  / 1988  
 Control efficiency (%) 95-98% Capture efficiency (%) 100%  
 Air pollutant(s) controlled VOM/Organic HAP Efficiency estimation method Mfg. Info.

**D. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) 4 Inside stack diameter (ft) 0.33  
 Stack temp (F) 62.4 Design stack flow rate (ACFM) 100  
 Actual stack flow rate (ACFM) < 100 Velocity (ft/sec) \_\_\_\_\_

**E. VOC-containing Substance Data**

EUD-2

2

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)****A. General Information**Emissions unit ID Tank #304 Description 30,000 gallon capacitySIC Code (4-digit) 4953 SCC Code 30199998**B. Emissions Unit Description**Equipment type Liquid Storage Tank Temporary Source ☐ Yes ☒ NoManufacturer Modern Welding Model No. NASerial Number S-4869-TK304 Installation Date 5 /  / 1988Articles being coated or degreased Application method Overspray (surface coating) (%)  Drying method No. of dryers  Tank capacity (degreasers) (gal) **C. Associated Air Pollution Control Equipment**Emissions unit ID CC #304 Device type Activated Carbon CanisterManufacturer TIGG Corporation Model No. N-100XP or equivalentSerial Number NA Installation Date 5 /  / 1988Control efficiency (%) 95-98% Capture efficiency (%) 100%Air pollutant(s) controlled VOM/Organic HAP Efficiency estimation method Mfg. Info.**D. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) 4 Inside stack diameter (ft) 0.33Stack temp (F) 62.4 Design stack flow rate (ACFM) 100Actual stack flow rate (ACFM) < 100 Velocity (ft/sec) **E. VOC-containing Substance Data**

EUD-2

2

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)****A. General Information**

Emissions unit ID Tank #306, Description 30,000 gallon capacity  
 SIC Code (4-digit) 4953, SCC Code 30199998

**B. Emissions Unit Description**

Equipment type Liquid Storage Tank, Temporary Source Yes X No  
 Manufacturer Modern Welding, Model No. NA  
 Serial Number S-4869-TK306, Installation Date 5 /   / 1988  
 Articles being coated or degreased    
 Application method    
 Overspray (surface coating) (%)  , Drying method    
 No. of dryers  , Tank capacity (degreasers) (gal)

**C. Associated Air Pollution Control Equipment**

Emissions unit ID CC #306, Device type Activated Carbon Canister  
 Manufacturer TIGG Corporation, Model No. N-100XP or equivalent  
 Serial Number NA, Installation Date 5 /   / 1988  
 Control efficiency (%) 95-98%, Capture efficiency (%) 100%  
 Air pollutant(s) controlled VOM/Organic HAP, Efficiency estimation method Mfg. Info.

**D. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) 4, Inside stack diameter (ft) 0.33  
 Stack temp (F) 62.4, Design stack flow rate (ACFM) 100  
 Actual stack flow rate (ACFM) < 100, Velocity (ft/sec)

**E. VOC-containing Substance Data**

EUD-2

2

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						





OMB No. 2060-0336, Approval Expires 06/30/2015

## Federal Operating Permit Program (40 CFR Part 71)

**EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)****A. General Information**Emissions unit ID Tank #308 Description 30,000 gallon capacitySIC Code (4-digit) 4953 SCC Code 30199998**B. Emissions Unit Description**Equipment type Liquid Storage Tank Temporary Source Yes ☒ NoManufacturer Modern Welding Model No. NASerial Number S-4869-TK308 Installation Date 5 /  / 1988Articles being coated or degreased Application method Overspray (surface coating) (%)  Drying method No. of dryers  Tank capacity (degreasers) (gal) **C. Associated Air Pollution Control Equipment**Emissions unit ID CC #308 Device type Activated Carbon CanisterManufacturer TIGG Corporation Model No. N-100XP or equivalentSerial Number NA Installation Date 5 /  / 1988Control efficiency (%) 95-98% Capture efficiency (%) 100%Air pollutant(s) controlled VOM/Organic HAP Efficiency estimation method Mfg. Info.**D. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) 4 Inside stack diameter (ft) 0.33Stack temp (F) 62.4 Design stack flow rate (ACFM) 100Actual stack flow rate (ACFM) < 100 Velocity (ft/sec) **E. VOC-containing Substance Data**

EUD-2

2

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)****A. General Information**Emissions unit ID Tank #310 Description 30,000 gallon capacitySIC Code (4-digit) 4953 SCC Code 30199998**B. Emissions Unit Description**Equipment type Liquid Storage Tank Temporary Source ☐ Yes ☒ NoManufacturer Modern Welding Model No. NASerial Number S-4869-TK310 Installation Date 5 /  / 1988Articles being coated or degreased Application method Overspray (surface coating) (%)  Drying method No. of dryers  Tank capacity (degreasers) (gal) **C. Associated Air Pollution Control Equipment**Emissions unit ID CC #310 Device type Activated Carbon CanisterManufacturer TIGG Corporation Model No. N-100XP or equivalentSerial Number NA Installation Date 5 /  / 1988Control efficiency (%) 95-98% Capture efficiency (%) 100%Air pollutant(s) controlled VOM/Organic HAP Efficiency estimation method Mfg. Info.**D. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) 4 Inside stack diameter (ft) 0.33Stack temp (F) 62.4 Design stack flow rate (ACFM) 100Actual stack flow rate (ACFM) < 100 Velocity (ft/sec) **E. VOC-containing Substance Data**

EUD-2

2

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)****A. General Information**

Emissions unit ID Tank #312 Description 10,000 gallon capacity  
 SIC Code (4-digit) 4953 SCC Code 30199998

**B. Emissions Unit Description**

Equipment type Liquid Storage Tank Temporary Source Yes X No  
 Manufacturer Modern Welding Model No. NA  
 Serial Number S-4869-TK312 Installation Date 5 /   / 1988  
 Articles being coated or degreased    
 Application method    
 Overspray (surface coating) (%)   Drying method    
 No. of dryers   Tank capacity (degreasers) (gal)

**C. Associated Air Pollution Control Equipment**

Emissions unit ID CC #312 Device type Activated Carbon Canister  
 Manufacturer TIGG Corporation Model No. N-100XP or equivalent  
 Serial Number NA Installation Date 5 /   / 1988  
 Control efficiency (%) 95-98% Capture efficiency (%) 100%  
 Air pollutant(s) controlled VOM/Organic HAP Efficiency estimation method Mfg. Info.

**D. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) 4 Inside stack diameter (ft) 0.33  
 Stack temp (F) 62.4 Design stack flow rate (ACFM) 100  
 Actual stack flow rate (ACFM) < 100 Velocity (ft/sec)

**E. VOC-containing Substance Data**

EUD-2

2

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)****A. General Information**Emissions unit ID Tank #314 Description 10,000 gallon capacitySIC Code (4-digit) 4953 SCC Code 30199998**B. Emissions Unit Description**Equipment type Liquid Storage Tank Temporary Source ☐ Yes ☒ NoManufacturer Modern Welding Model No. NASerial Number S-4869-TK314 Installation Date 5 /  / 1988Articles being coated or degreased Application method Overspray (surface coating) (%)  Drying method No. of dryers  Tank capacity (degreasers) (gal) **C. Associated Air Pollution Control Equipment**Emissions unit ID CC #314 Device type Activated Carbon CanisterManufacturer TIGG Corporation Model No. N-100XP or equivalentSerial Number NA Installation Date 5 /  / 1988Control efficiency (%) 95-98% Capture efficiency (%) 100%Air pollutant(s) controlled VOM/Organic HAP Efficiency estimation method Mfg. Info.**D. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) 4 Inside stack diameter (ft) 0.33Stack temp (F) 62.4 Design stack flow rate (ACFM) 100Actual stack flow rate (ACFM) < 100 Velocity (ft/sec) **E. VOC-containing Substance Data**

EUD-2

2

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
NA						





OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSIONS UNIT DESCRIPTION FOR VOC EMITTING SOURCES (EUD-2)****A. General Information**Emissions unit ID Tank #390, Description 30,000 gallon capacitySIC Code (4-digit) 4953, SCC Code 30199998**B. Emissions Unit Description**Equipment type Liquid Storage Tank, Temporary Source ☐ Yes ☒ NoManufacturer Modern Welding, Model No. NASerial Number S-4869-TK390, Installation Date 5 /  / 1988Articles being coated or degreased Application method Overspray (surface coating) (%) , Drying method No. of dryers , Tank capacity (degreasers) (gal) **C. Associated Air Pollution Control Equipment**Emissions unit ID None, Device type Manufacturer , Model No. Serial Number , Installation Date  /  / Control efficiency (%) , Capture efficiency (%) Air pollutant(s) controlled , Efficiency estimation method **D. Ambient Impact Assessment**

This information must be completed by temporary sources or when ambient impact assessment is an applicable requirement for this emissions unit (this is not common).

Stack height (ft) , Inside stack diameter (ft) Stack temp (F) , Design stack flow rate (ACFM) Actual stack flow rate (ACFM) , Velocity (ft/sec)

EUD-2

2

**E. VOC-containing Substance Data**

List each VOC-containing substance consumed, processed or produced at the emissions unit that is emitted into the air. In the name column, if providing a brand name, include the name of the manufacture; if the substance contains HAP, list the constituent HAP.

Substance Name (Chemical, Brand Name)	CAS No.	Substance Type	Actual Usage (gal/yr)	Max Usage (gal/day)	Max Usage (gal/year)	VOC Content (lb/gal)
Diesel Fuel			NA			



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSION CALCULATIONS (EMISS)**

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

**A. Emissions Unit ID** Unit #2**B. Identification and Quantification of Emissions**

First, list each air pollutant that is either regulated at the unit or present in major amounts, then list any other regulated pollutant (for fee calculation) not already listed. HAP may be simply listed as "HAP." Next, calculate PTE for applicability purposes and actual emissions for fee purposes for each pollutant. Do not calculate PTE for air pollutants listed solely for fee purposes. Include all fugitives for fee purposes. You may round to the nearest tenth of a ton for yearly values or tenth of a pound for hourly values.

Air Pollutants	Emission Rates			CAS No.
	Actual Annual Emissions (tons/yr)	Potential to Emit		
		Hourly (lb/hr)	Annual (tons/yr)	
CO		2.55	6.6	
VOM		8.0	0.9	
NOx		3.26	4.0	
PM2.5		0.1405	0.6156	
PM10		0.6388	2.8	
Part		0.6388	2.8	
SOx		1.21	7.7	
HCl/Cl2		2.19	9.92	

Air Pollutants	Emission Rates			CAS No.
	Actual Annual Emissions (tons/yr)	Potential to Emit		
		Hourly (lb/hr)	Annual (tons/yr)	
Hg		0.0028	0.0125	7439-97-6
As		0.0020	0.0088	7440-38-2
Be		0.0020	0.0088	7440-41-7
Cd		0.0050	0.0221	7440-43-9
Cr		0.0020	0.0088	7440-47-3
Sb		0.0020	0.0088	7440-31-5
Pb		0.0050	0.0221	7439-92-1
Ni		0.0020	0.0088	7440-02-0
Dioxin/Furan		4.38 x 10 <sup>-9</sup>	1.92 x 10 <sup>-8</sup>	



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSION CALCULATIONS (EMISS)**

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

**A. Emissions Unit ID** Unit #3

**B. Identification and Quantification of Emissions**

First, list each air pollutant that is either regulated at the unit or present in major amounts, then list any other regulated pollutant (for fee calculation) not already listed. HAP may be simply listed as "HAP." Next, calculate PTE for applicability purposes and actual emissions for fee purposes for each pollutant. Do not calculate PTE for air pollutants listed solely for fee purposes. Include all fugitives for fee purposes. You may round to the nearest tenth of a ton for yearly values or tenth of a pound for hourly values.

Air Pollutants	Emission Rates			CAS No.
	Actual Annual Emissions (tons/yr)	Potential to Emit		
		Hourly (lb/hr)	Annual (tons/yr)	
CO		2.65	6.6	
VOM		8.0	0.9	
NOx		3.26	4.0	
PM2.5		0.1462	0.6404	
PM10		0.6646	2.91	
Part		0.6646	2.91	
SOx		1.21	7.7	
HCl/Cl2		2.22	10.03	

Air Pollutants	Emission Rates			CAS No.
	Actual Annual Emissions (tons/yr)	Potential to Emit		
		Hourly (lb/hr)	Annual (tons/yr)	
Hg		0.0029	0.0130	7439-97-6
As		0.0021	0.0092	7440-38-2
Be		0.0021	0.0092	7440-41-7
Cd		0.0052	0.0229	7440-43-9
Cr		0.0021	0.0092	7440-47-3
Sb		0.0021	0.0092	7440-31-5
Pb		0.0052	0.0229	7439-92-1
Ni		0.0021	0.0092	7440-02-0
Dioxin/Furan		2.73 x 10 <sup>-8</sup>	1.20 x 10 <sup>-7</sup>	



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSION CALCULATIONS (EMISS)**

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

A. Emissions Unit ID Unit #4**B. Identification and Quantification of Emissions**

First, list each air pollutant that is either regulated at the unit or present in major amounts, then list any other regulated pollutant (for fee calculation) not already listed. HAP may be simply listed as "HAP." Next, calculate PTE for applicability purposes and actual emissions for fee purposes for each pollutant. Do not calculate PTE for air pollutants listed solely for fee purposes. Include all fugitives for fee purposes. You may round to the nearest tenth of a ton for yearly values or tenth of a pound for hourly values.

Air Pollutants	Emission Rates			CAS No.
	Actual Annual Emissions (tons/yr)	Potential to Emit		
		Hourly (lb/hr)	Annual (tons/yr)	
CO		8.03	13.86	
VOM		8	3.1	
NOx		14.61	61.6	
PM2.5		0.4432	1.94	
PM10		2.01	16.92	
Part		2.01	16.92	
SOx		4.23	50.76	
HCl/Cl2		2.38	10.40	

Air Pollutants	Emission Rates			CAS No.
	Actual Annual Emissions (tons/yr)	Potential to Emit		
		Hourly (lb/hr)	Annual (tons/yr)	
Hg		0.0090	0.0393	7439-97-6
As		0.0064	0.0278	7440-38-2
Be		0.0064	0.0278	7440-41-7
Cd		0.0159	0.0695	7440-43-9
Cr		0.0064	0.0278	7440-47-3
Sb		0.0064	0.0278	7440-31-5
Pb		0.0159	0.0695	7439-92-1
Ni		0.0064	0.0278	7440-02-0
Dioxin/Furan		1.52 x 10 <sup>-7</sup>	6.65 x 10 <sup>-7</sup>	





OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSION CALCULATIONS (EMISS)**

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

**A. Emissions Unit ID** Bulk Feed Building (BF Bldg)

**B. Identification and Quantification of Emissions**

First, list each air pollutant that is either regulated at the unit or present in major amounts, then list any other regulated pollutant (for fee calculation) not already listed. HAP may be simply listed as "HAP." Next, calculate PTE for applicability purposes and actual emissions for fee purposes for each pollutant. Do not calculate PTE for air pollutants listed solely for fee purposes. Include all fugitives for fee purposes. You may round to the nearest tenth of a ton for yearly values or tenth of a pound for hourly values.

Air Pollutants	Emission Rates			CAS No.
	Actual Annual Emissions (tons/yr)	Potential to Emit		
		Hourly (lb/hr)	Annual (tons/yr)	
VOM		0.5836	2.56	
Benzene		0.0043	0.0188	71-43-2



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSION CALCULATIONS (EMISS)**

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

**A. Emissions Unit ID** Drum Crusher

**B. Identification and Quantification of Emissions**

First, list each air pollutant that is either regulated at the unit or present in major amounts, then list any other regulated pollutant (for fee calculation) not already listed. HAP may be simply listed as "HAP." Next, calculate PTE for applicability purposes and actual emissions for fee purposes for each pollutant. Do not calculate PTE for air pollutants listed solely for fee purposes. Include all fugitives for fee purposes. You may round to the nearest tenth of a ton for yearly values or tenth of a pound for hourly values.

Air Pollutants	Emission Rates			CAS No.
	Actual Annual Emissions (tons/yr)	Potential to Emit		
		Hourly (lb/hr)	Annual (tons/yr)	
VOM		0.883	3.87	
Benzene		0.057	0.248	71-43-2



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSION CALCULATIONS (EMISS)**

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

**A. Emissions Unit ID** LabPack Repack

**B. Identification and Quantification of Emissions**

First, list each air pollutant that is either regulated at the unit or present in major amounts, then list any other regulated pollutant (for fee calculation) not already listed. HAP may be simply listed as "HAP." Next, calculate PTE for applicability purposes and actual emissions for fee purposes for each pollutant. Do not calculate PTE for air pollutants listed solely for fee purposes. Include all fugitives for fee purposes. You may round to the nearest tenth of a ton for yearly values or tenth of a pound for hourly values.

Air Pollutants	Emission Rates			CAS No.
	Actual Annual Emissions (tons/yr)	Potential to Emit		
		Hourly (lb/hr)	Annual (tons/yr)	
VOM		0.3321	1.45	
Benzene		0.0552	0.2418	71-43-2



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSION CALCULATIONS (EMISS)**

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

A. Emissions Unit ID MP-1**B. Identification and Quantification of Emissions**

First, list each air pollutant that is either regulated at the unit or present in major amounts, then list any other regulated pollutant (for fee calculation) not already listed. HAP may be simply listed as "HAP." Next, calculate PTE for applicability purposes and actual emissions for fee purposes for each pollutant. Do not calculate PTE for air pollutants listed solely for fee purposes. Include all fugitives for fee purposes. You may round to the nearest tenth of a ton for yearly values or tenth of a pound for hourly values.

Air Pollutants	Emission Rates			CAS No.
	Actual Annual Emissions (tons/yr)	Potential to Emit		
		Hourly (lb/hr)	Annual (tons/yr)	
VOM		0.0545	0.2387	
Benzene		0.0366	0.0495	71-43-2



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSION CALCULATIONS (EMISS)**

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

**A. Emissions Unit ID** MP-2**B. Identification and Quantification of Emissions**

First, list each air pollutant that is either regulated at the unit or present in major amounts, then list any other regulated pollutant (for fee calculation) not already listed. HAP may be simply listed as "HAP." Next, calculate PTE for applicability purposes and actual emissions for fee purposes for each pollutant. Do not calculate PTE for air pollutants listed solely for fee purposes. Include all fugitives for fee purposes. You may round to the nearest tenth of a ton for yearly values or tenth of a pound for hourly values.

Air Pollutants	Emission Rates			CAS No.
	Actual Annual Emissions (tons/yr)	Potential to Emit		
		Hourly (lb/hr)	Annual (tons/yr)	
VOM		0.0545	0.2387	
Benzene		0.0366	0.0495	71-43-2



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSION CALCULATIONS (EMISS)**

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

A. Emissions Unit ID Boiler #1**B. Identification and Quantification of Emissions**

First, list each air pollutant that is either regulated at the unit or present in major amounts, then list any other regulated pollutant (for fee calculation) not already listed. HAP may be simply listed as "HAP." Next, calculate PTE for applicability purposes and actual emissions for fee purposes for each pollutant. Do not calculate PTE for air pollutants listed solely for fee purposes. Include all fugitives for fee purposes. You may round to the nearest tenth of a ton for yearly values or tenth of a pound for hourly values.

Air Pollutants	Emission Rates			CAS No.
	Actual Annual Emissions (tons/yr)	Potential to Emit		
		Hourly (lb/hr)	Annual (tons/yr)	
CO		0.863	3.79	
VOM		0.057	0.248	
NOx		1.03	4.51	
PM2.5		0.078	0.343	
PM10		0.078	0.343	
Part		0.078	0.343	
NH3		0.033	0.144	
SOx		0.006	0.027	



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSION CALCULATIONS (EMISS)**

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

A. Emissions Unit ID EGEN 1**B. Identification and Quantification of Emissions**

First, list each air pollutant that is either regulated at the unit or present in major amounts, then list any other regulated pollutant (for fee calculation) not already listed. HAP may be simply listed as "HAP." Next, calculate PTE for applicability purposes and actual emissions for fee purposes for each pollutant. Do not calculate PTE for air pollutants listed solely for fee purposes. Include all fugitives for fee purposes. You may round to the nearest tenth of a ton for yearly values or tenth of a pound for hourly values.

Air Pollutants	Emission Rates			CAS No.
	Actual Annual Emissions (tons/yr)	Potential to Emit		
		Hourly (lb/hr)	Annual (tons/yr)	
CO		0.36	0.09	
VOM		0.13	0.03	
NOx		1.69	0.42	
PM2.5		0.12	0.03	
PM10		0.12	0.03	
Part		0.12	0.03	
SOx		0.11	0.03	
HAP		0.0005	0.0001	



OMB No. 2060-0336, Approval Expires 06/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**EMISSION CALCULATIONS (EMISS)**

Calculate potential to emit (PTE) for applicability purposes and actual emissions for fee purposes for each emissions unit, control device, or alternative operating scenario identified in section I of form **GIS**. If form **FEE** does not need to be submitted with the application, do not calculate actual emissions.

**A. Emissions Unit ID** EGEN 2

**B. Identification and Quantification of Emissions**

First, list each air pollutant that is either regulated at the unit or present in major amounts, then list any other regulated pollutant (for fee calculation) not already listed. HAP may be simply listed as "HAP." Next, calculate PTE for applicability purposes and actual emissions for fee purposes for each pollutant. Do not calculate PTE for air pollutants listed solely for fee purposes. Include all fugitives for fee purposes. You may round to the nearest tenth of a ton for yearly values or tenth of a pound for hourly values.

Air Pollutants	Emission Rates			CAS No.
	Actual Annual Emissions (tons/yr)	Potential to Emit		
		Hourly (lb/hr)	Annual (tons/yr)	
CO		0.36	0.09	
VOM		0.13	0.03	
NOx		1.69	0.42	
PM2.5		0.12	0.03	
PM10		0.12	0.03	
Part		0.12	0.03	
SOx		0.11	0.03	
HAP		0.0005	0.0001	





OMB No. 2060-0336, Approval Expires 06/30/2015

## Federal Operating Permit Program (40 CFR Part 71)

**POTENTIAL TO EMIT (PTE)**

For each unit with emissions that count towards applicability, list the emissions unit ID and the PTE for the air pollutants listed below and sum them up to show totals for the facility. You may find it helpful to complete form **EMISS** before completing this form. Show other pollutants not listed that are present in major amounts at the facility on attachment in a similar fashion. You may round values to the nearest tenth of a ton. Also report facility totals in section **J** of form **GIS**.

Emissions Unit ID	Regulated Air Pollutants and Pollutants for which the Source is Major (tons/yr)						
	NOx	VOC	SO <sub>2</sub>	PM <sub>10</sub>	CO	Lead	HAP
UNIT #2	4.0	0.9	7.7	2.80	6.6	0.0221	11.04
UNIT #3	4.0	0.9	7.7	2.91	6.6	0.0221	10.40
UNIT #4	61.6	3.1	51.76	8.82	13.86	0.0695	11.49
LABPACK REPACK		1.45					0.2418
MP-1		0.2387					0.0495
MP-2		0.2387					0.0495
DRUM CRUSHER		3.87					0.248
TANK #2		0.1348					0.0002
TANK #4		0.0203					3.65 X 10 <sup>-5</sup>
TANK #6		0.0133					2.40 X 10 <sup>-5</sup>

Emissions Unit ID	Regulated Air Pollutants and Pollutants for which the Source is Major (tons/yr)						
	NOx	VOC	SO2	PM10	CO	Lead	HAP
TANK #8		0.0256					$4.61 \times 10^{-5}$
TANK #10		0.0125					$2.25 \times 10^{-5}$
TANK #20		0.0460					0.0001
TANK #30		0.0203					$3.65 \times 10^{-5}$
TANK #40		0.0143					$2.58 \times 10^{-5}$
TANK #50		0.0085					$1.53 \times 10^{-5}$
TANK #60		0.0257					$4.62 \times 10^{-5}$
TANK #300		0.1454					0.0003
TANK #302		0.4224					0.0008
TANK #304		0.3094					0.0006
TANK #306		1.29					0.0023
TANK #308		1.62					0.0029
TANK #310		2.18					0.0039
TANK #312		3.23					0.0058
TANK #314		0.4736					0.0009

Emissions Unit ID	Regulated Air Pollutants and Pollutants for which the Source is Major (tons/yr)						
	NOx	VOC	SO2	PM10	CO	Lead	HAP
BF BLDG		2.56					0.0188
BOILER #1	4.51	0.248	0.027	0.343	3.79		
FUGITIVE EQUIP LEAKS		0.0390					0.0014
EGEN1	0.42	0.03	0.03	0.03	0.09	0.0	0.0001
EGEN2	0.42	0.03	0.03	0.03	0.09	0.0	0.0001
FACILITY TOTALS	74.95	23.60	67.25	14.93	30.94	0.1137	33.40



OMB No. 2060-0336, Approval Expires 6/30/2015

Federal Operating Permit Program (40 CFR Part 71)

**CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS (CTAC)**

This form must be completed, signed by the "Responsible Official" designated for the facility or emission unit, and sent with each submission of documents (i.e., application forms, updates to applications, reports, or any information required by a part 71 permit).

**A. Responsible Official**Name: (Last) Harris (First) Douglas (MI)Title General ManagerStreet or P.O. Box #7 Mobile AvenueCity Sauget State IL ZIP 62201 - 1069Telephone (618) 271 - 2804 Ext.      Facsimile (618) 271 - 2128**B. Certification of Truth, Accuracy and Completeness** (to be signed by the responsible official)

I certify under penalty of law, based on information and belief formed after reasonable inquiry, the statements and information contained in these documents are true, accurate and complete.

Name (signed) Douglas HarrisName (typed) Douglas Harris Date: 4 / 4 / 13

## **APPENDIX A: EMISSION CALCULATIONS**

Vessel Contents AnalysisVessel volume (ft<sup>3</sup>) = 7.3524R = 998.9 (mmHg)/(ft<sup>3</sup>)/(lbmole)/(K)

## Assumptions:

1. Each container contents is uniformly representative of the overall waste mixture received at the plant.
2. The overall waste mixture at the plant is characterized by the top organic constituents in waste received for 2007 - 2011.

A	B	C	D	E	F	G	H	I	J
VOC	MW (lb/lbmole)	Weight (lbs)	lbmoles	Xi	Psati	pi	Vapor (lbmoles)	Vapor (lbs)	Comments
acetonitrile	41.05	3,361,228	81,881	0.0100	86.37	0.86	0.00002	0.00087	
acrylonitrile	53.1	804,316	15,147	0.0018	105.83	0.20	4.83E-06	0.00026	
atrazine	215.68	356,148	1,651	0.0002	0.00	0.00	1.44E-15	3.10E-13	
cyanide compounds	27.03	138,879	5,138	0.0006	1.00	0.00	1.55E-08	4.19E-07	
ethylbenzene	106.17	633,274	5,965	0.0007	9.51	0.01	1.71E-07	0.00002	
hydrazine	32.05	180,238	5,624	0.0007	10.00	0.01	1.69E-07	0.00001	
methanol	32.04	6,070,501	189,466	0.0231	126.94	2.93	0.00007	0.00232	
methyl isobutyl ketone	100.16	3,042,483	30,376	0.0037	19.28	0.07	1.77E-06	0.00018	
methyl tert-butyl ether	88.15	405,413	4,599	0.0006	273.71	0.15	3.79E-06	0.00033	
n-butyl alcohol	74.12	1,503,986	20,291	0.0025	6.16	0.02	3.77E-07	0.00003	
n-hexane	86.18	747,614	8,675	0.0011	151.54	0.16	3.96E-06	0.00034	
nitrate compounds	84.99	181,239	2,132	0.0003	0.00	0.00	0.00E+00	0.00E+00	None in vapor
phthalic anhydride	148.1	154,635	1,044	0.0001	0.00	0.00	0.00E+00	0.00E+00	None in vapor
pyridine	79.1	169,554	2,144	0.0003	45.09	0.01	2.91E-07	0.00002	
styrene	104.15	1,915,487	18,392	0.0022	6.18	0.01	3.43E-07	0.00004	
toluene	92.13	8,657,468	93,970	0.0115	28.44	0.33	0.00001	0.00074	
triethylamine	101.2	850,752	8,407	0.0010	67.78	0.07	1.72E-06	0.00017	
xylene	106.17	2,328,688	21,934	0.0027	8.30	0.02	5.49E-07	0.00006	
as ethanol	46.07	93,612,150	2,031,955	0.2479	59.16	14.67	0.00036	0.01669	Avg volatility for smaller amounts VOM in waste
as water	18.02	93,612,150	5,194,903	0.6339	23.69	15.01	0.00037	0.00668	
solids (as lead)	207.2	93,612,150	451,796	0.0551					None in vapor

VOM Emission Factor Calculation for Drum Crusher

Emission Factor = Summation of Pounds VOM from Column J above

= 0.0221 pounds per drum

Maximum rate of crushing = 40 drums per hour

Maximum VOM emission rate =  $0.0221 \times 40 = 0.8833$  pounds VOM per hour

Maximum annual VOM rate =  $0.8833 \times 8,760 / 2,000 = 3.87$  tons VOM per year

**APPENDIX B: CURRENT NOTIFICATION OF COMPLIANCE (NOC)  
OPL SUMMARY**



### UNITS 2/3 OPERATING PARAMETER LIMITS <sup>1</sup>

<u>Operating Parameter</u>	<u>Units</u>	<u>Limits</u>	<u>Test Date</u>	<u>Performance Standards</u>
Maximum Total Pumpable Waste (Hourly Rolling Total)	Lb/hr	3107	Jan, 1993	DRE, D/F
Maximum Total Hazardous Waste (Hourly Rolling Total)	Lb/hr	4017	Jan, 1993	DRE, D/F
Maximum Stack Gas Flow Rate (Hourly Rolling Average)	Acfm	15,147	Jan, 1993	DRE, D/F, Part., SVM, LVM
Minimum Primary Combustion Chamber Temperature (Hourly Rolling Average)	Deg F	1686	Dec, 2009	DRE, D/F
Minimum Secondary Combustion Chamber Temperature (Hourly Rolling Average)	Deg F	1877	Dec., 2009	DRE, D/F
Maximum Baghouse Inlet Temperature (Hourly Rolling Average)	Deg F	420	Dec, 2009	D/F, SVM, LVM
Max. Pump. Low Volatile Metals Feedrate (12 Hour Rolling Total)	Lb/hr	46	Sep, 2008	LVM
Max. Total Low Volatile Metals Feedrate (12 Hour Rolling Total)	Lb/hr	47	Sep, 2008	LVM
Maximum Semi Volatile Metals Feedrate (12 Hour Rolling Total)	Lb/hr	63	Sep, 2008	SVM
Maximum Mercury Feedrate (12 Hour Rolling Total)	Lb/hr	0.0019	Aug, 2008	Hg
Maximum Chlorine Feedrate (12 Hour Rolling Total)	Lb/hr	218	Aug, 2008	SVM, LVM HCl/Cl <sub>2</sub>
Maximum Ash Feedrate (12 Hour Rolling Total)	Lb/hr	617	Dec, 2009	Part.
Minimum Sorbent Feedrate (Hourly Rolling Average)	Lb/lb Cl <sub>2</sub>	1.57	Dec, 2009	HCl/Cl <sub>2</sub>
Minimum Carrier Fluid Flowrate (Hourly Rolling Average)	Gal/lb Cl <sub>2</sub>	1.46	Dec, 2009	HCl/Cl <sub>2</sub>

<sup>1</sup> Operating parameter limits in table reflect more conservative value between Unit 2 and Unit 3 test data.

### UNIT 4 OPERATING PARAMETER LIMITS

<u>Operating Parameter</u>	<u>Units</u>	<u>Limits</u>	<u>Test Date</u>	<u>Performance Standards</u>
Maximum Total Pumpable Waste (Hourly Rolling Total)	Lb/hr	PCC - 3291 SCC - 1176	Dec, 2009	DRE, D/F
Maximum Total Hazardous Waste (Hourly Rolling Total)	Lb/hr	PCC - 12,897 SCC - 1176	Dec, 2009	DRE, D/F
Maximum Stack Gas Flow Rate (Hourly Rolling Average)	Acfm	37,432	Dec, 2009	DRE, D/F, Part., SVM, LVM
Minimum Primary Combustion Chamber Temperature (Hourly Rolling Average)	Deg F	1499	Dec, 2009	DRE, D/F
Minimum Secondary Combustion Chamber Temperature (Hourly Rolling Average)	Deg F	1886	Dec, 2009	DRE, D/F
Maximum Baghouse Inlet Temperature (Hourly Rolling Average)	Deg F	400	Dec, 2009	D/F, SVM, LVM
Max. Pump. Low Volatile Metals Feedrate (12 Hour Rolling Total)	Lb/hr	47	Aug., 2008	LVM
Max. Total Low Volatile Metals Feedrate (12 Hour Rolling Total)	Lb/hr	50	Aug., 2008	LVM
Maximum Semi Volatile Metals Feedrate (12 Hour Rolling Total)	Lb/hr	64	Aug., 2008	SVM
Maximum Mercury Feed rate (12 Hour Rolling Total)	Lb/hr	0.026	Aug., 2008	Hg
Maximum Chlorine Feed rate (12 Hour Rolling Total)	Lb/hr	229	Dec, 2009	SVM, LVM, HCl/Cl <sub>2</sub>
Maximum Ash Feed Rate (12 Hour Rolling Total)	Lb/hr	6444	Dec, 2009	Part.
Carbon Injection Feedrate (Hourly Rolling Average)	Lb/hr	6.2	Dec, 2009	D/F, Hg
Minimum Sorbent Feedrate (Hourly Rolling Average)	Lb/lb Cl <sub>2</sub>	2.25	Dec, 2009	HCl/Cl <sub>2</sub>
Minimum Carrier Fluid Flowrate (Hourly Rolling Average)	Gal/lb Cl <sub>2</sub>	3.10	Dec, 2009	HCl/Cl <sub>2</sub>